TITLE V OPERATING PERMIT

Issued pursuant to Title 22a of the Connecticut General Statutes (CGS), §22a-174-33 of the Regulations of Connecticut State Agencies (RCSA), and pursuant to the Code of Federal Regulations (CFR), Title 40, Part 70.

Title V Permit Number	***092 - 0024 - TV***
Client/Sequence/Town/Premises Number	***1095 - 1 - 92 - 2***
Date Issued	April 22, 2004
Expiration Date	April 22, 2009

Corporation:

Dow Chemical - Allyn's Point Plant

Premises Location:

1761 Route 12, Gales Ferry, CT 06335

Name of Responsible Official and Title:

Jonathon Jones, Responsible Care Leader

All the following attached pages, 2 through 254, are hereby incorporated by reference into this Title V operating permit.

ARTHUR J. ROCQUE, JR.
Arthur J. Rocque, Jr.
Commissioner

4/22/04
Date

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List of Acronyms

ACRONYM	DESCRIPTION
ABS	Acrylonitrile-Butadiene-Styrene
acfm	Actual Cubic Feet Per Minute
APCE	Air Pollution Control Efficiency
ASC	Actual Stack Concentration
ASME	American Society of Mechanical Engineers
ASTM	American Society of Test Methods
CAA(A)	Clean Air Act or Clean Air Act Amendment of 1990
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
CGS	Connecticut General Statutes
CO	Carbon Monoxide
CT	Connecticut
EPPU	Elastomer Product Process Unit
EU	Emissions Unit
º F	Degrees Fahrenheit
ft^3	Cubic Feet
GEU	Grouped Emissions Unit
HAP	Hazardous Air Pollutant
HCFC	Hydrochlorofluorocarbons
HLV	Hazard Limiting Value
Kg	kilogram
kPa	kilo Pascals
lb	Pound
LPG	Liquid Petroleum Gas
MACT	Maximum Available Control Technology (NESHAP)
MASC	Maximum Allowable Stack Concentration
m^3	Cubic Meters
MM	Million (prefix)
MMBTU	Million British Thermal Units
MSDS	Material Safety Data Sheet
NESHAP	National Emission Standards for Hazardous Air Pollutants NO_X
NSPS	New Source Performance Standard
PM_{10}	Particulate Matter of Ten Microns in Diameter
ppm(v)	Parts per Million (Volume)
PSI(A)	Pounds per Square Inch (Absolute)
RACT	Reasonably Available Control Technology
RMP	Risk Management Plan
RCSA	Regulations of Connecticut State Agencies
scm/min	Standard Cubic Meter per Minute
SIP	State Implementation Plan
SNAP	Significant New Alternatives Policy
SOCMI	Synthetic Organic Chemical Manufacturing Industry
SOS	Standard Operating Scenario
SO_X	Sulfur Oxides
SV	Storage Vessel
SVE	Soil Vapor Extraction
TOC	Total Organic Compounds
TPPU	Thermoplastic Product Process Unit
TSP	Total Suspended Particulate
TPY	Tons per Year
US EPA	United States Environmental Protection Agency
VP	Vapor Pressure
VOC	Volatile Organic Compound
$\mu g/m^3$	Micro Grams Per Cubic Meters

Title V Operating Permit

All conditions in Sections III, IV, and VII of this permit are enforceable by both the Administrator and the Commissioner unless otherwise specified. Applicable requirements and compliance demonstration are set forth in Section III of this permit. The Administrator or any citizen of the United States may bring an action to enforce all permit terms or conditions or requirements contained in Sections III, IV, and VII of this permit in accordance with the Clean Air Act (CAA), as amended.

Section I: Premises Information/Description

A. PREMISES INFORMATION

Nature of Business: Polymer production
Primary SIC: 2821 (Latex, Styron®, and Magnum® Production), 3086 (Styrofoam® Production)
Facility Mailing Address: Dow Chemical Company
Allyn's Point Plant
1761 Route 12
Gales Ferry, CT 06335
Telephone Number: (860) 447-7238

B. PREMISES DESCRIPTION

The Dow Chemical Allyn's Point Plant (Dow Chemical) consists of four manufacturing operations under three operating departments: the Polystyrene Plant "G" (Styron® Plant) and the Acrylonitrile-Butadiene-Styrene (ABS) Polymer Plant "E" (Magnum® Plant) which share common equipment and processes, the Emulsion Polymer Plant (Latex Plant), and the Styrofoam® Plant.

The Styron® Plant produces polymers using styrene monomer. Additionally, diluents and additives such as organic feedstock, and small quantities of solid additives vary the characteristics of the polymers. The manufacturing process consists of a continuous feed of raw materials to the reactor where polymerization occurs. Unreacted raw materials are removed from the products and recycled back into the process. The finished product is extruded, cooled, and pelletized prior to being transferred to the product silo storage facility. The product is used in food packaging, appliance parts, toys, and medical ware.

The Magnum® Plant is similar to the Styron® Plant and utilizes styrene, acrylonitrile, and synthetic rubber as raw materials and also diluents and additives that vary the characteristics of the polymer. The plant retains the capability to transition to other styrene and acrylonitrile based polymers as the business needs dictate. The manufacturing process consists of feed batch preparation followed by continuous addition of the feed to the reactors where polymerization takes place. Unreacted raw materials and diluents are removed from the products and recycled back into the process. The finished product is extruded, cooled and pelletized prior to being transferred to the product storage facilities. ABS product is used in the manufacture of automobile parts, pipe, furniture, and appliances.

The extruders from both the Styron® Plant and the Magnum® Plant are equipped with de-misters to control volatile organic compound (VOC) emissions. VOC emissions from the Styron® Plant are further controlled by venting to the Dowtherm Heater "A."

The Latex Plant produces different emulsion polymers using styrene and 1,3-butadiene as the primary monomers. It also uses other monomers to vary the characteristics of the polymer. The manufacturing process consists of the monomer and aqueous feeds to the reactor. Unreacted raw materials and diluents are then removed from the products via stripping. The vapors emitted from the reactor and the stripper are vented to the styrene scrubber, which controls 90% of the VOC emissions. VOC emissions are then vented to the thermal oxidizer which was installed in 1991 and has a control efficiency of no less than 99.9%. The product is cooled and filtered prior to being transferred to the finished product storage facilities. Various additives are added to the products to vary their properties. The product is used within the paper industry to coat magazine pages and within the flooring industry on backing of vinyl flooring.

Dow Chemical also produces Styrofoam®, which is manufactured from polystyrene. Plastic encapsulated talc and polyethylene resin, along with recycled Styrofoam® in pellet form are fed into an extruder along with some additives. The mix is melted within the extruder and foaming agents (refrigerants subject to 40 CFR Part 82) are added. Extruded product is cooled and cut into 3-inch thick boards. Cutting and planing

B. PREMISES DESCRIPTION

of the boards is controlled by a cyclone which vents to a baghouse. Flexographic printing on the finished boards is done with water-based inks.

Dow Chemical is a major stationary source of hazardous air pollutants (HAP), particulate matter (PM_{10}/TSP), and volatile organic compounds (VOC). Dow Chemical holds 8 active permits: the Styron® Plant, Dowtherm Heater "A", Dowtherm Heater "B", 2-boilers, a diesel engine, the Latex Plant, and a soil vapor extraction (SVE) system. Dow Chemical was determined to be a minor source of Nitrogen Oxides (NO_X) with potential emissions near the major stationary source threshold (50 TPY). Subsequently, Dow Chemical submitted a compliance plan for minor source status under NO_X Reasonably Available Control Technology (RACT) in 1995. Dow Chemical is also subject to VOC RACT State Order No. 8011 (Order No. 8011). Order No. 8011 constitutes VOC RACT across the Styrofoam® Plant, the Latex Plant, the Styron® Plant, the Magnum® Plant, and storage vessels which populate the premises. A significant number of emissions units are exempt from the permitting requirements due to the regulations in effect at the time of installation.

NESHAP: Dow Chemical's Styron® Plant and Magnum® Plant are subject to 40 CFR Part 63, Subpart JJJ "*National Emission Standards for Hazardous Air Pollutants (NESHAP) for Polystyrene and ABS Resin Production*." The Latex Plant is subject to 40 CFR Part 63, Subpart U "*NESHAP for Group IV Polymer and Resins*." Certain applicable provisions from 40 CFR Part 63, Subpart H "*NESHAP for Equipment Leaks*," and Subpart G "*NESHAP for Synthetic Organic Chemical Manufacturing Industry* (*SOCMI) for Process Vents, Storage Vessels, Transfer Operations, and Wastewater*" apply via Subparts JJJ and U.

The Dowtherm Heater "A" is subject to 40 CFR Part 63, Subpart EEE "*NESHAP for Hazardous Waste Combustors*" of which only Phase I source standards (Subpart EEE) have been promulgated at this time. However, Dowtherm Heater "A" is subject to the Phase II source standards, which will be promulgated on June 14, 2005. Such standards will be promulgated as part of the "*NESHAP for Industrial Boilers, Institutional/Commercial Boilers, and Process Heaters*" in 40 CFR Part 63, Subpart DDDDD. Dowtherm Heater "B" (EU-04) is also subject to Subpart DDDDD as a "*small liquid fuel catergory source*" and the boilers (EU-028 and EU-029) are also subject to Subpart DDDDD but as "*existing large and limited liquid use*" sources.

The emergency engine (EU-005) is subject to 40 CFR Part 63, Subpart ZZZZ "*NESHAP for Stationary Reciprocating Internal Combustion Engines*."

NSPS: Dow Chemical is subject to 40 CFR Part 60, Subpart DDD "*National Standards of Performance (NSPS) for VOC Emissions from the Polymer Manufacturing Industry.*" Pursuant to 40 CFR §63.1311(h)(1), a polystyrene resin production process subject to 40 CFR Part 63, Subpart JJJ is exempt from the requirement to comply with 40 CFR Part 60, Subpart DDD.

Dow Chemical is also subject to 40 CFR Part 60, Subpart VV "*NSPS for Equipment Leaks of VOC in SOCMI.*" Pursuant to 40 CFR §63.1311(k), an affected source subject to 40 CFR Part 63, Subpart JJJ is exempt from the requirement to comply with 40 CFR Part 60, Subpart VV.

Dow Chemical is subject to 40 CFR Part 60, Subpart Kb "*NSPS for Volatile Organic Liquid Storage Vessels including Petroleum Liquids.*"

Section II: Emissions Units Information

A. EMISSIONS UNIT IDENTIFICATION

Emission Units are set forth and detailed in Table II.A.

TABLE II.A: EMISSIONS UNIT IDENTIFICATION

Emissions Unit		Emissions Unit Description	Control Unit Description	Permit, Order, or Registration Number[1]
	EU-001	Dowtherm Heater "A" (Styron®/Magnum® Plant)	None	Permit No. 092-0006
	EU-001A	Magnum® 1st Devolatizer Condenser (E2430)	Dowtherm Heater "A" (GEU-001 vents to the Dowtherm Heater "A")	Order No. 8011 Permit No. 092-0010
	EU-001B	Styron®/Magnum® Plant Reactors (R401, R402, R403, R405, R2200)		
	EU-001C	Styron®/Magnum® Plant Devolatizers (V501, V550, V2410, V2420)		
GEU-001	EU-001D	Magnum® Knock Out Pot (V603)		
Styron® Plant & Magnum® Plant	EU-001E	Styron®/Magnum® Plant Vacuum Flush (V615, V2451)		
	EU-001F	Styron®/Magnum® Plant Recycle Tanks (V107, V108, V109, V1506)		
	EU-001G	Styron®/Magnum® Plant Ethylbenzene Tank (V106)		
	EU-001H	Magnum® Acrylonitrile Day Tank (V102)		
	EU-001I	Magnum® Acrylonitrile & Water Tank (V1050)		
	EU-001J	Magnum® Rubber Slurry Tank (V210)		

[1] It is not intended to incorporate by reference these New Source Review Permits, Orders, or Registrations into this Title V Operating Permit.

Section II: Emissions Units Information

A. EMISSIONS UNIT IDENTIFICATION

TABLE II.A: EMISSIONS UNIT IDENTIFICATION

Emissions Unit		Emissions Unit Description	Control Unit Description	Permit, Order, or Registration Number[1]
GEU-001	EU-001K	Magnum® Rubber Dissolvers (V213, V215)	Dowtherm Heater "A"	Order No. 8011 Permit No. 092-0010
	EU-001L	Styron® Bluetone Tank (V2125)		
	EU-001M	Styron® KOT Tank (V2425)		
	EU-001N	Ethylbenzene Off Still Tank (V105)		
	EU-001O	Alternate Fuel Tank (V1910)		
	EU-001P	Styron®/Magnum® Recycle Filters (FL2445A, FL2445B)		
	EU-001Q	Styron® Blow Down Tank (V2400)		
	EU-001R	Styron® Feed Filters (FL2100A, 2100B, FL671, FL672)		
	EU-001S	Magnum® Recycle to Train Filter (FL112)		
	EU-001T	Not in Use		
	EU-001U	Styron Tars® Recycle Filter (FL1910A, FL1910B)		

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Section II: Emissions Units Information

A. EMISSIONS UNIT IDENTIFICATION

TABLE II.A: EMISSIONS UNIT IDENTIFICATION

Emissions Unit		Emissions Unit Description	Control Unit Description	Permit, Order, or Registration Number[1]
GEU-001	EU-001V	Magnum® Vacuum Flush Filter (FL618)	Dowtherm Heater "A"	Order No. 8011 Permit No. 092-0010
	EU-001W	Magnum® Recycle Out Filter (FL616)		
	EU-001X	Styron® 1st Stage Condenser Sump (V2431)		
	EU-001Y	Magnum® Primary Condenser Surge Tank (V604)		
	EU-001Z	Styron® Vacuum Pump Heat Exchanger (E2451, E2452)		
	EU-001AA	Styron® Recycle De-Superheater (E2425)		
	EU-001BB	Styron® Reflux Condenser (E2200)		
	EU-001CC	Magnum® Feed Preheater (E912)		
	EU-001DD	Magnum® Condensers (E601, E604, E607, E615)		
	EU-001EE	Magnum® Intercooler 2 (E911)		
	EU-001FF	Magnum® Intercooler (D930)		

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Section II: Emissions Units Information

A. EMISSIONS UNIT IDENTIFICATION

TABLE II.A: EMISSIONS UNIT IDENTIFICATION

Emissions Unit		Emissions Unit Description	Control Unit Description	Permit, Order, or Registration Number[1]
GEU-001	EU-001GG	Styron® 2nd Devolatizer Condenser (E2435A)	Dowtherm Heater "A"	Order No. 8011 Permit No. 092-0010
	EU-001HH	Not in Use (Desourced)		
	EU-001II	Magnum® Devolatizer FPH (PE505, PE551)		
	EU-001JJ	Styron®/Magnum® Plant Vent Drip Pot (D101, D102, D103)		
	EU-001KK	Secondary Feed Filter (FL673A)		
	EU-001LL	Mercaptan Feed Tank (V326)		
	EU-01MM	Magnum® Feed Preheater (E326)		
GEU-002 (Styron® Plant)	EU-002A	Styron® Zinc Feed Tank (V2825A)	None	Order No. 8011 Permit No. 092-0010
	EU-002B	Styron® Zinc Mix Tank (V2825B)		
	EU-002C	Styron® Seal Flush Tank (V2201)		
	EU-002D	Styron® Plant Extrusion Dies - 3	Styron® Demister	
	EU-002E	Styron® Plant Pelletizer	None	Exempt

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Section II: Emissions Units Information

A. EMISSIONS UNIT IDENTIFICATION

TABLE II.A: EMISSIONS UNIT IDENTIFICATION

Emissions Unit		Emissions Unit Description	Control Unit Description	Permit, Order, or Registration Number[1]
GEU-003 Magnum® Plant	EU-003A	Magnum® Wax Slurry Tank (V713)	None	Order No. 8011
	EU-003B	Magnum® Plant - Extrusion Dies A & B	Magnum® Demister	
	EU-003C	Magnum® Pelletizer	None	Exempt
EU-004		Dowtherm Heater "B" (Styron®/Magnum® Plant)	None	Permit No. 092-0007
EU-005		Detroit Diesel Generator (Styron®/Magnum® Plant)	None	Permit No. 092-0019
EU-006		Acrylonitrile Storage Tank (D38)	Vapor Recovery Vent & Nitrogen Blanket	Order No. 8011
EU-007		Styrene Storage Tanks - D1, D2, and D3 (Styron®/Magnum® Plant)	Vapor Recovery Vent & Nitrogen Blanket	Exempt
EU-008		Styrene Storage Tanks - D26, D36, and D37 (Styron®/Magnum® Plant)		
EU-009		Styron® Silo Pellet System 1	Particulate Air Filter	Exempt
EU-010		Styron® Silo Pellet System 3		
EU-011		Styron® Silo Pellet System 4		
EU-012		Styron® Silo Pellet System 5		

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Section II: Emissions Units Information

A. Emissions Unit Identification

TABLE II.A: Emissions Unit Identification

Emissions Unit		Emissions Unit Description	Control Unit Description	Permit, Order, or Registration Number[1]
EU-013		Styron® Silo Pellet System 6	Particulate Air Filter	Exempt
EU-014		Magnum® Silo Pellet System 7		
EU-015		Magnum® Silo Pellet Take Away System		
GEU-016 Latex Production	EU-016	Latex Thermal Oxidizer	None	Permit No. 092-0016
	EU-016A	Latex Reactors (R3300, R400A)	Thermal Oxidizer	Order No. 8011 Permit No. 092-0016
	EU-016B	Latex Stripper (T-3410)		
	EU-016C	Latex Styrene Scrubber (T3510)		
	EU-016D	Latex Degasser (D3400)		
	EU-016E	Latex Step Tank (V3405)		
	EU-016F	Latex Recycle Storage Tanks (V3500A, V3500B)		
	EU-016G	Latex Decanter Storage (V3575)		
	EU-016H	Latex Vacuum Cooler (V3420)		

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Section II: Emissions Units Information

A. EMISSIONS UNIT IDENTIFICATION

TABLE II.A: EMISSIONS UNIT IDENTIFICATION

Emissions Unit		Emissions Unit Description	Control Unit Description	Permit, Order, or Registration Number[1]
GEU-016	EU-016I	Latex Reflux Condenser (E3300)	Thermal Oxidizer	Order No. 8011 Permit No. 092-0016
	EU-016J	Latex Column Condenser (E3410)		
	EU-016K	Latex Vacuum Condenser (E3420)		
	EU-016L	Latex Knock Out Pot (V3411)		
	EU-016M	Latex Stripper "A" (D500A)		
	EU-016N	Latex Stripper Condenser (E515A)		
	EU-016O	Latex Reactor "A" Reflux Condenser (E430A)		
	EU-016P	Latex Knockout Tank (D510A)		
	EU-016Q	Latex Separator Pot (D575A)		
	EU-016R	Latex Inhibitor Tank (ME512A)		
	EU-016S	Latex Thermal Oxidizer Knock Out Pot (V3513)		
	EU-016T	Latex Partial Condenser (T515A)		

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Section II: Emissions Units Information

A. Emissions Unit Identification

TABLE II.A: Emissions Unit Identification

Emissions Unit		Emissions Unit Description	Control Unit Description	Permit, Order, or Registration Number[1]
GEU-016	EU-016U	Latex Hot Water Tank (D520A)	Thermal Oxidizer	Order No. 8011 Permit No. 092-0016
	EU-016V	Latex Styrene Scrubber Storage (V3510)		
	EU-016W	Latex Styrene Scrubber Tank Filter (FL3250)		
	EU-016X	Latex Recycle Oil Filter (FL3500)		
	EU-016Y	Latex Styrene Scrubber Filter (FL3515)		
	EU-016Z	Latex Batch Stripper Condenser (E510A)		
	EU-016AA	Latex Decanter Transfer Filter (FL3570)		
	EU-016BB	Latex Butadiene Storage Sphere (V3200)	Refrigerated & Pressurized Tank	Order No. 8011 Permit No. 092-0016
	EU-016CC	Latex Acrylic Acid Tank (V46)	Conservation Vents	Permit No. 092-0016
	EU-016DD	Latex Tertiary-Dodecyl-Mercaptan Tank (V3250)	Nitrogen Blanket & Rupture Disk	
	EU-016EE	Latex Ammonium Hydroxide Storage Tank (V39) (29% ammonia)	Conservation Vents	
	EU-016FF	Latex Hydroxyl-Ethyl-Acrylate Tank (V3210)	Conservation Vents	
EU-017 - EU-021		Not in Use	Not Applicable	Not Applicable

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Section II: Emissions Units Information

A. Emissions Unit Identification

TABLE II.A: Emissions Unit Identification

Emissions Unit		Emissions Unit Description	Control Unit Description	Permit, Order, or Registration Number[1]
GEU-022 Styrofoam® Production	EU-022A	Styrofoam® Rough Trim/Edge/Grinder	Bag Filters to a Baghouse	Order No. 8011
	EU-022B	Styrofoam® Feed Stock Silos		
	EU-022C	Styrofoam® Solid Raw Material Storage		
	EU-022D	Styrofoam® Finishing/Packaging System		
	EU-022E	Styrofoam® Recycle System		
	EU-022F	Styrofoam® Plastics Processing Including Extrusion Die & Printer	None	Order No. 8011 Registration No. 092-0078
	EU-022G	Styrofoam® Ethyl Chloride Tank (V116) (tank is empty, ethyl chloride is no longer used as a blowing agent at this time.)	Not Applicable	Order No. 8011
	EU-022H	Styrofoam® HCFC-142b Tank (V126)		
	EU-022I	Styrofoam® Board Storage Area		
	EU-022J	Styrofoam® HCFC-22 Tank		
EU-023 - EU-027		Not in Use	Not Applicable	Not Applicable

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Section II: Emissions Units Information

A. Emissions Unit Identification

TABLE II.A: Emissions Unit Identification

Emissions Unit		Emissions Unit Description	Control Unit Description	Permit, Order, or Registration Number[1]
EU-028		Wickes Boiler E7C4 (premises)	Low NO_X Burner	Permit No. 092-0015
EU-029		Wickes Boiler E7D3 (premises)	Low NO_X Burner	Permit No. 092-0020
EU-030		Fuel Storage - Gasoline Tank and Dispensing Station (D38)	Submerged Fill Pipe	Exempt
GEU-031 **Fuel Storage Tanks - Diesel (No. 2 Fuel Oil)**	EU-031A	No. 2 Fuel Oil Storage Tank (V1950)	None	Exempt
	EU-031B	No. 2 Fuel Oil Storage Tank (V100A)		
	EU-031C	No. 2 Fuel Oil Storage Tank (V100B)		
	EU-031D	No. 2 Fuel Oil Storage Tank (D9A)		
	EU-031E	No. 2 Fuel Oil Storage Tank (D9B)		
	EU-031F	No. 2 Fuel Oil Storage Tank (D9C)		
	EU-031G	No. 2 Fuel Oil Storage Tank (D9D)		
	EU-031H	No. 2 Fuel Oil Storage Tank (D39)		

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Section II: Emissions Units Information

A. Emissions Unit Identification

TABLE II.A: Emissions Unit Identification

Emissions Unit		Emissions Unit Description	Control Unit Description	Permit, Order, or Registration Number[1]
GEU-031	EU-031I	No. 2 Fuel Oil Storage Tank, Bldg. 41	None	Exempt
	EU-031J	No. 2 Fuel Oil Storage Tank, Bldg. 45		
	EU-031K	No. 2 Fuel Oil Storage Tank, Bldg. 47		
	EU-031L	No. 2 Fuel Oil Storage Tank, Bldg. 21		
	EU-031M	No. 2 Fuel Oil Storage Tank, Bldg. 44		
GEU-032 Solvent Cleaning Operations	EU-032A	Solvent Cleaning Operations Use of Methylene Chloride	Water Cover	Exempt
	EU-032B	Solvent Cleaning Operations Use of 1,1,1-Trichloroethane		
GEU-033 Soil Vapor Extraction (SVE) System	EU-033A	SVE Adsorber/Desorber	Vapor Recovery System	Permit No. 092-0022
	EU-033B	SVE Associated Blowers and Pumps		
	EU-033C	SVE Contaminate Liquid Storage Tank		
	EU-033D	SVE Air/Water Separator System		

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Section II: Emissions Units Information

A. Emissions Unit Identification

TABLE II.A: Emissions Unit Description

Emissions Unit		Emissions Unit Description	Control Unit Description	Permit, Order, or Registration Number[1]
GEU-033	EU-033E	SVE Drum Storage Area	Vapor Recovery System	Permit No. 092-0022
EU-034		Latex Cooling Tower	Drift Eliminator	Exempt
EU-035		Latex Waste Water Treatment Plant	None	None
GEU-036 Refrigeration Units Using Freon-22	EU-036A	MRU 930	None	Exempt
	EU-036B	Butadiene Chiller		
	EU-036C	Latex Chiller		
	EU-036D	North Chiller		
	EU-036E	South Chiller		
GEU-037		Ethylene Glycol Supply Line and Refrigeration Units	None	Exempt
EU-038		Styron® Silo Pellet System 9	Particulate Air Filter	Exempt
EU-039		Styron® Silo Pellet System 10		

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Section II: Emissions Units Information

A. EMISSIONS UNIT IDENTIFICATION

TABLE II.A: EMISSIONS UNIT DESCRIPTION

Emissions Unit	Emissions Unit Description	Control Unit Description	Permit, Order, or Registration Number[1]
EU-040	Emergency Engine Model V6-125 111 HP (Bldg. 41)	None	Exempt
EU-041	Emergency Engine Model NHS-6-IF, Cummins (Bldg. 45)		
EU-042	Emergency Engine Model NHS-6-IF, Cummins (Bldg. 47)		
EU-043	Mechanical Refrigeration Unit (2001) 3000-lb of anhydrous ammonia	None	Exempt
EU-044	Emergency Engine Model Allis-Chalmers #21000/H	None	Exempt

Section II: Emissions Units Information

B. STANDARD OPERATING SCENARIO

The Permittee shall be allowed to operate under the following scenario without notifying the Commissioner, provided that such operations are explicitly provided for and described in Table II.B below. The standard operating scenario (S0S) is detailed in Table II.B below. There are no alternative operating scenarios at this time.

TABLE II.B: STANDARD OPERATING SCENARIO (SOS)

Emissions Units Associated with the Scenario	Description of Scenario
EU-001	The Permittee operates **Dowtherm Heater "A"** firing natural gas, No. 2 fuel oil, and waste products. Waste products are fired in conjunction with either natural gas or No. 2 fuel oil normally in a 50/50 ratio. The sulfur content of No. 2 fuel oil shall not exceed 0.2% by weight, dry basis and for waste product, 0.10% by weight, dry basis.
GEU-001 (EU-001A - EU-001MM) & GEU-002 (EU-002A - EU-002E)	The Permittee operates the **Styron® Plant** by feeding styrene and recycled styrene into a reactor where it is heated up with Dowtherm (heat transfer oil) and reacts to form a polymer of taffy-like consistency. Material is passed to the devolitizer where the VOCs are drawn off under vacuum to the condensing system and sent to recycle for reuse. Material then goes to the second devolitizer then breaks into 3 streams to extruders going through water baths. Material is cooled until it becomes solid and is cut up into clear plastic pellets. Extruders have de-misters for VOC control. Emissions from process equipment and fugitive losses from tanks are directed to the air make-up of the Dowtherm Heater "A".
GEU-001 (EU-001A - EU-001MM) & GEU-003 (EU-003A - EU-003C)	The Permittee operates the ABS **Magnum® Plant** similarly to the Styron® Plant except 3 reactors are employed and rubber is added. Molten polymer is extruded through dies. Resulting product is a milky white plastic pelletized form. Extruders have de-misters for VOC control. Emissions from process equipment and fugitive losses from tanks are directed to the air make-up of the Dowtherm Heater "A" for combustion.
EU-004	The Permittee operates **Dowtherm Heater "B"** firing either natural gas or No. 2 fuel oil. The sulfur content in No. 2 fuel oil shall not exceed 0.20% by weight, dry basis.
EU-005	The Permittee operates the emergency engine using No. 2 fuel oil. The sulfur content shall not exceed 0.20 % sulfur by weight, dry basis.
EU-006 - EU-008	The Permittee stores materials in storage tanks as specified in Table II.A of this Title V operating permit.
EU-009 - EU-0015	The Permittee stores product (pellets) in silos as specified in Table II.A of this Title V operating permit. Particulate emissions are controlled through the use of particulate air filters.
GEU-016 (EU-016)	The Permittee operates the **Latex Thermal Oxidizer** firing natural gas and LPG.

Section II: Emissions Units Information

B. STANDARD OPERATING SCENARIO

TABLE II.B: STANDARD OPERATING SCENARIO (SOS)	
Emissions Units Associated with the Scenario	**Description of Scenario**
GEU-016 (EU-016A - EU-016AA)	The Permittee operates **Latex production** as a batch process introducing raw materials into various reactors where water and initiator are added. The reactors heat and agitate the latex mixture at about 215 ˚F. Once in the stripping column, steam is blown through and strips off any non-reacted monomer. The non-reacted monomer then goes to the vapor condenser where the water is removed allowing the monomer to be reused. The mix meanwhile leaves the stripping column and goes through a vacuum/cool stage then to the adjusting tank, where biocide is added. The resulting product is shipped in liquid form. The vapors from the reactors and strippers vent to the **thermal oxidizer** achieving a control efficiency of 99.9%.
GEU-016 (EU-016BB - EU-016FF)	The Permittee stores raw materials in storage tanks as specified in Table II.A of this Title V operating permit.
EU-017 - EU-021	Not in Use.
GEU-022 (EU-022A - EU-022J)	The Permittee operates **Styrofoam® production** by combining encapsulated talc and polyethylene resin along with recycled Styrofoam® in pellet form, fed into an extruder with additives. The mix is melted within the extruder and foaming agents are added. After cooling, product leaves extruder die and hardens prior to reaching the cutters. Particulate matter emissions from cutting and planing of boards is controlled by bag filters that exhaust to a **baghouse**.
EU-023 - EU-027	Not in Use.
EU-028 & EU-029	The Permittee operates the boilers firing No. 2 fuel oil and natural gas. The sulfur content in No. 2 fuel oil shall not exceed 0.20% by weight, dry basis.
EU-030	The Permittee stores gasoline in the storage tank and dispenses gasoline from a small dispensing station.
GEU-031 (EU-031A - EU-031M)	The Permittee stores No. 2 fuel oil in the storage tanks.
GEU-032 (EU-032A & EU-032B)	The Permittee uses Methyl Chloride and 1,1,1-Trichlorethane in the solvent cleaning operations.
GEU-033 (EU-033A - EU-033E)	The Permittee operates a soil vapor extraction system at a closed landfill at the Allyn's Point Plant. Effluent is treated using a Thermatrix fixed bed resin adsorption system achieving an overall control efficiency of VOC equal to or greater than 95%.

Section II: Emissions Units Information

B. STANDARD OPERATING SCENARIO

TABLE II.B: STANDARD OPERATING SCENARIO (SOS)	
Emissions Units Associated with the Scenario	**Description of Scenario**
EU-034	The Permittee operates the cooling tower using water as a coolant.
EU-035	The Permittee operates the wastewater treatment plant using cement pits and filters prior to discharging into the Thames River. EU-035 has no applicable requirements at this time.
GEU-036 (EU-036A-EU-036E)	The Permittee runs the refrigeration units using Freon-22
GEU-037	The Permittee provides premises-wide cooling via an ethylene glycol supply line and refrigeration units. GEU-037 has no applicable requirements at this time.
EU-038 - EU-039	The Permittee stores product (pellets) in silos as specified in Table II.A of this Title V operating permit. Particulate matter emissions are controlled through the use of particulate air filters.
EU-040 - EU-042	The Permittee operates the emergency engines firing diesel fuel oil. The sulfur content in the diesel fuel oil shall not exceed 0.30% by weight, dry basis. Applicable requirements for EU-040 – EU-042 are located in Table III.Q "Premises-Wide General Requirements" of this Title V operating permit.
EU-043	The Permittee runs refrigeration unit using Anhydrous Ammonia. EU-043 has no applicable requirements at this time.
EU-044	The Permittee operates the emergency engine firing diesel fuel oil. The sulfur content in the diesel fuel oil shall not exceed 0.30% by weight, dry basis. Applicable requirements for EU-044 are located in Table III.Q "Premises-Wide General Requirements" of this Title V operating permit.

Section II: Emissions Units Information

C. PREMISES-WIDE MONITORING, RECORDING, & REPORTING REQUIREMENTS

***Premises-Wide Monitoring Requirements*:**

- *In accordance with Section VII.E of this Title V operating permit, the Permittee shall submit to the Commissioner on a semi-annual basis (once every six months) a written monitoring report [RCSA §22a-174-33(o)(1) & 40 CFR §70.6(a)(3)(iii)].*
- *Unless otherwise required by this permit, the Permittee shall verify compliance with the emissions limitations and operation restrictions set forth in Section III of this Title V operating permit, at a minimum, on a semi-annual basis [RCSA §22a-174-33(o)(1)].*

***Premises-Wide Recording & Reporting Requirements*:** *The Permittee shall:*

- *Maintain records, in accordance with Section VII.F of this Title V operating permit, of all required monitoring data and supporting information for a minimum of five years commencing on the date such records were created and kept on site at the premises [RCSA §22a-174-33(o)(2) & 40 CFR §70.6(a)(3)(ii)];*
- *Have certified by a responsible official, in accordance with Section VII.B and VII.C of this Title V operating permit, any report or document required by this Title V operating permit and any other information submitted to the Commissioner or Administrator [RCSA §22a-174-33(b), RCSA §22a-174-2a(a), & 40 CFR §70.6(c)(1)];*
- *Provide any records and/or additional information to the Commissioner, in accordance with Section VII.D of this Title V operating permit, within 30 days of receipt of a written request from the Commissioner or such sooner time as the Commissioner may require [RCSA §22a-174-33(j)(1)(X) & RCSA §22a-174-4(c)(1)]; and*
- *Record annual emissions and submit such annual emissions inventory statements to the Commissioner once per year [RCSA §22a-174-4(c)(1), Connecticut State Implementation Plan (CT SIP) for Air Quality Emission Statements].*

The following tables contain summaries of applicable regulations and limitations and/or restrictions for each identified Emissions Unit and Operating Scenario, regulated by this permit. Each Compliance Demonstration requirement is designated a condition number and is delineated below. Note: F or S denotes enforceability. F = federal and state enforceable conditions, S = state only enforceable conditions.

Section III: Applicable Requirements and Compliance Demonstration

A. EU-001 - DOWTHERM HEATER "A"

- **APPLICABLE REQUIREMENTS**

TABLE III.A: APPLICABLE REQUIREMENTS EU-001

Pollutant or Process Parameter	Limitation or Restriction	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F/S
NO_X	Less than or equal to: ▪ 0.250 lb/MMBTU, 2.250 lb/hour ▪ 9.86 TPY	Permit No. 092-0006	A.1	F
SO_X	Less than or equal to: ▪ 0.214 lb/MMBTU, 1.926 lb/hour ▪ 8.44 TPY ▪ 0.20% sulfur by weight (dry basis) in No. 2 fuel oil ▪ 0.10% sulfur by weight (dry basis) in waste fuel oil		A.2	
CO	Less than or equal to : ▪ 0.089 lb/MMBTU, 0.801 lb/hour ▪ 3.51 TPY		A.3	
VOC	Less than or equal to: ▪ 0.004 lb/MMBTU, 0.036 lb/hour ▪ 0.16 TPY		A.4	
PM_{10}	Less than or equal to ▪ 0.012 lb/MMBTU, 0.108 lb/hour ▪ 0.47 TPY		A.5	
TSP	Less than or equal to ▪ 0.015 lb/MMBTU, 0.135 lb/hour ▪ 0.59 TPY			

Section III: Applicable Requirements and Compliance Demonstration

A. EU-001 - DOWTHERM HEATER "A"

- **APPLICABLE REQUIREMENTS**

TABLE III.A: APPLICABLE REQUIREMENTS EU-001

Pollutant or Process Parameter		Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number	F/S
Fuel Firing Rate (Hourly)		Maximum fuel firing rate less than or equal to 67 gallons/hour when firing **No. 2 fuel oil**	Permit No. 092-0006	A.6	F
		Maximum fuel firing rate less than or equal to 9,000 ft^3/hour when firing **natural gas**			
		Maximum fuel firing rate less than or equal to 67 gallons/hour when firing **waste fuel**			
Fuel Consumption Rate (Annually)		Maximum fuel consumption over any consecutive 12 month period less than or equal to 587,000 gallons for **No. 2 fuel oil**			
		Maximum fuel consumption over any consecutive 12 month period less than or equal to 78,800,000 ft^3 for **natural gas**			
		Maximum fuel consumption over any consecutive 12 month period less than or equal to 293,000 gallons for **waste fuel**			
HAP (State)		**Allowable stack concentration less than or equal to ($\mu g/m^3$):**		A.7	
	Sulfuric Acid	2,943.70			
	Arsenic	6.36			
	Beryllium	0.30			
	Chromium	3.69			
	Nickel	67.56			
	Cadmium	7.65			
	Formaldehyde	162.64			
	Copper	9.71			
	Mercury	21.93			
	Silver	18.71			
	Antimony	46.08			
	Barium	16.83			
	Thallium	60.38			
	Lead	8.99			

Section III: Applicable Requirements and Compliance Demonstration

A. EU-001 - DOWTHERM HEATER "A"

- **APPLICABLE REQUIREMENTS**

TABLE III.A: APPLICABLE REQUIREMENTS EU-001

Pollutant or Process Parameter	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number	F/ S
HAP (Federal)	Effective June 14, 2005, the Permittee shall comply with all applicable requirements and work practice standards for Phase II HWC sources.	40 CFR Part 63, Subpart EEE Phase II Source Standards for HWC (to be promulgated in 40 CFR Part 63, Subpart DDDDD)	A.8	F

Section III: Applicable Requirements and Compliance Demonstration

A. EU-001 - DOWTHERM HEATER "A"

- **COMPLIANCE DEMONSTRATION**

A.1. **NO_X**: Emissions of NO_X shall not exceed those limits stated in Condition A.1, Table III.A of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

A.1.a. **Monitoring and Testing Requirements**

i. The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from Permit No. 092-0006 ("*Compilation of Air Pollutant Emission Factors*", AP-42, US EPA), the hourly fuel firing rate and the annual fuel consumption rate [Permit No. 092-0006].

ii. The Permittee shall maintain good operational practices by following the manufacturers instructions for the Dowtherm Heater "A" [RCSA §§22a-174-33(j)(1)(K) & 40 CFR 70.6(a)(3)(i)].

iii. If required by the Commissioner, the Permittee shall measure emissions using the average of three one-hour tests, each performed over a consecutive 60-minute period. The emissions testing method for NO_X shall be performed in accordance with Method 7, 40 CFR Part 60 [RCSA §22a-174-5(b)(7)].

A.1.b. **Record Keeping Requirements**

i. The Permittee shall maintain records of the requirements above in Paragraph "a", Condition A.1, "*Monitoring and Testing Requirements*," Section III.A of this Title V operating permit [Permit No. 092-0006].

ii. The Permittee shall maintain records of all tune-ups, repairs, replacement of parts and other maintenance performed [RCSA §22a-174-(4)(c)(1)].

iii. The Permittee shall maintain records of the dates, times, and places of all emissions testing, the persons performing the measurements, the test methods used, the operating conditions at time of testing, and the results of such testing [RCSA §22a-174-4(c)(1)].

A.2. **SO_X**: Emissions of SO_X and the fuel sulfur content of both No. 2 fuel oil and waste fuel oil shall not exceed those limits stated in Condition A.2, Table III.A of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

A.2.a. **Monitoring and Testing Requirements**

i. The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from Permit No. 092-0006 ("*Compilation of Air Pollutant Emission Factors*", AP-42, US EPA, the hourly fuel firing rate and the annual fuel consumption rate [Permit No. 092-0006].

ii. The Permittee shall monitor fuel merchant certifications from the fuel supplier certifying the type of fuel, the weight percent of sulfur (dry basis) in the fuel, name of fuel supplier, and the method used to determine the sulfur content of fuel for each shipment of liquid fuel [RCSA §§22a-174-4(c)(1) & 22a-174-19(a)(5)]. Fuel sulfur content of waste fuel shall be determined according to the most current American Society for Testing and Materials methods D 129 or D 1552 [RCSA §22a-174-5(b)(1)].

A.2.b. **Record Keeping Requirements**

i. The Permittee shall maintain records of the requirements above in Paragraph "a", Condition A.2, "*Monitoring and Testing Requirements*," Section III.A of this Title V operating permit [Permit No. 092-0006].

ii. The Permittee shall maintain records of fuel merchant certifications from the fuel supplier certifying the type of fuel, the weight percent of sulfur (dry basis) in the fuel, name of fuel supplier, and the method used to determine the sulfur content of fuel for each shipment of liquid fuel [RCSA §§22a-174-4(c)(1) & 22a-174-19(a)(5)].

Section III: Applicable Requirements and Compliance Demonstration

A. EU-001 - DOWTHERM HEATER "A"

- **COMPLIANCE DEMONSTRATION**

A.3. CO: Emissions of CO shall not exceed those limits stated in Condition A.3, Table III.A of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

A.3.a. Monitoring and Testing Requirements

i. The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from Permit No. 092-0006 ("*Compilation of Air Pollutant Emission Factors*", AP-42, US EPA), the hourly fuel firing rate and the annual fuel consumption rate [Permit No. 092-0006].

ii. The Permittee shall maintain good operational practices by following the manufacturers instructions for the Dowtherm Heater "A" [RCSA §§22a-174-33(j)(1)(K) & 40 CFR 70.6(a)(3)(i)].

A.3.b. Record Keeping Requirements

The Permittee shall maintain records of the requirements above in Paragraph "a", Condition A.3, "*Monitoring and Testing Requirements*," Section III.A of this Title V operating permit [Permit No. 092-0006].

A.4. VOC: Emissions of VOC shall not exceed those limits stated in Condition A.4, Table III.A of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements.

A.4.a. Monitoring and Testing Requirements

i. The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from Permit No. 092-0006 ("*Compilation of Air Pollutant Emission Factors*", AP-42, US EPA), the hourly fuel firing rate and the annual fuel consumption rate [Permit No. 092-0006].

ii. The Permittee shall maintain good operational practices by following the manufacturers instructions for the Dowtherm Heater "A" [RCSA §§22a-174-33(j)(1)(K) & 40 CFR 70.6(a)(3)(i)].

A.4.b. Record Keeping Requirements

The Permittee shall maintain records of the requirements above in Paragraph "a", Condition A.4, "*Monitoring and Testing Requirements*," Section III.A of this Title V operating permit [Permit No. 092-0006].

A.5. TSP/PM_{10}: Emissions of TSP and PM_{10} shall not exceed those limits stated in Condition A.5, Table III.A of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to the following requirements:

A.5.a. Monitoring and Testing Requirements

The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from Permit No. 092-0006 ("*Compilation of Air Pollutant Emission Factors*", AP-42, US EPA) and the hourly fuel firing rate [Permit No. 092-0006].

A.5.b. Record Keeping Requirements

The Permittee shall maintain records of the requirements above in Paragraph "a", Condition A.5, "*Monitoring and Testing Requirements*," Section III.A of this Title V operating permit [Permit No. 092-0006].

A.6. Fuel Firing Rate (Hourly)/Fuel Consumption Rate (Annual): The fuel firing rate and fuel consumption rate shall not exceed those limits stated in Condition A.6, Table III.A of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

Section III: Applicable Requirements and Compliance Demonstration

A. EU-001 - DOWTHERM HEATER "A"

- **COMPLIANCE DEMONSTRATION**

A.6.a. Monitoring and Testing Requirements

i. The Permittee shall monitor or mechanically limit the hourly fuel consumption rate [Permit No. 092-0006].

ii. The Permittee shall monitor monthly and annual amounts of each fuel consumed. If more than one fuel tank services the Dowtherm Heater "A", the Permittee shall use a fuel-metering device to continuously monitor fuel consumption. The Permittee shall monitor monthly meter readings for natural gas usage. The Permittee shall determine annual fuel consumption by adding (for each fuel) the current month's fuel usage to that of the previous eleven (11) months. The Permittee shall make these calculations on a monthly basis [Permit No. 092-0006].

A.6.b. Record Keeping Requirements

The Permittee shall maintain the records required above in Paragraph "a", Condition A.6, "*Monitoring and Testing Requirements,*" Section III.A of this Title V operating permit [Permit No. 092-0006].

A.7 **State HAP**: HAP emissions shall not exceed those limits stated in Condition A.7, Table III.A of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

A.7.a. Monitoring and Testing Requirements

i. The Permittee shall ensure that each HAP listed in Condition A.7, Table III.A of this Title V operating permit shall not exceed its respective allowable stack concentration (ASC). The ASC shall be calculated using the emissions factors obtained from Permit No. 092-0006 (stack test data); the hourly fuel firing rate; and the minimum exhaust gas flow rate at maximum rated capacity: 3265 acfm [Permit No. 092-0006].

ii. The Permittee shall monitor operating parameters of the Dowtherm Heater "A" and maintain operation in accordance with applicable manufacturer instructions [RCSA §§22a-174-29(b)].

iii. The Permittee may be required to conduct stack testing to determine concentration of HAPs should the Commissioner determine that operation of Dowtherm Heater "A" might reasonably be expected to cause an exceedance of an applicable Hazard Limiting Value (HLV) or Ambient Air Quality Standard [RCSA §22a-174-29(e)(1)].

A.7.b. Record Keeping Requirements

The Permittee shall maintain the records required above in Paragraph "a", Condition A.7, "*Monitoring and Testing Requirements,*" Section III.A of this Title V operating permit [Permit No. 092-0006].

A.8 **Federal HAP**: HAP emissions shall not exceed the Phase II source standards referenced in Condition A.8, Table III.A of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements [Example Placeholder Language for the HWC MACT Standard 40 CFR Part 63, Subpart EEE, throughout Condition A.8]:

A.8.a. Initial Comprehensive Performance Test and Continuous Monitoring System (CMS) Performance Evaluation

Not later than 6 months after the compliance date, the Permittee shall commence the initial comprehensive performance test and CMS performance evaluation, meeting all applicable requirements of 40 CFR §§63.1207, 63.1208, 63.7, and 63.8. The Permittee shall complete the test not later than 60 days after commencing it. The Permittee shall also meet the following three requirements related to the initial comprehensive performance test and CMS performance evaluation:

i. Not later than 1 year before the initial comprehensive performance test and CMS performance evaluation is scheduled to commence, the source shall submit a Notification of Initial

Section III: Applicable Requirements and Compliance Demonstration

A. EU-001 - DOWTHERM HEATER "A"

- **COMPLIANCE DEMONSTRATION**

A.8.a. Initial Comprehensive Performance Test and Continuous Monitoring System (CMS) Performance Evaluation, Continued

Comprehensive Performance Test and CMS Performance Evaluation and a site-specific test plan and CMS evaluation plan as required by 40 CFR §§63.1207(e), 63.9(e), and 63.9(g)(1) and (3).

ii. After the Administrator has approved the test plan and CMS performance evaluation plan, the Permittee shall make the plans available to the public for review. The Permittee shall issue a public notice announcing the approval of the plans and the location where the plans are available for review, as required by 40 CFR §63.1207(e)(2).

iii. Not later than 60 days before the initial comprehensive performance test and CMS performance evaluation is scheduled to commence, the Permittee shall submit a notification of intent to conduct the performance test, along with any comments received on the approved test plan and CMS performance evaluation plan.

A.8.b. Notification of Compliance

Not later than 90 days after completing the initial comprehensive performance test and CMS performance evaluation, the Permittee shall submit a Notification of Compliance that meets the applicable requirements of 40 CFR §§63.1210(d), 63.1207(j), 63.9(h), 63.10(d)(2), and 63.10(e)(2). Depending on the submittal date, the Permittee will meet one of the following two conditions:

i. If the Notification of Compliance is postmarked on or after the compliance date, the Permittee must comply with the emission standards and operating parameter limits established in the notification beginning on the date of postmark.

ii. If the Notification of Compliance is postmarked before the compliance date, the Permittee must comply with the emission standards and operating parameter limits established in the notification beginning on the compliance date.

A.8.c. Documentation of Compliance

Depending on the submittal date of the Notification of Compliance, the Permittee shall meet one of the following two conditions:

i. If the Permittee has not submitted the Notification of Compliance by the compliance date, the Permittee shall develop and include in the operating record (by the compliance date) a Documentation of Compliance (DOC) that meets the requirements of 40 CFR §63.1211(d). The Permittee shall comply with the emission standards and operating parameter limits specified in the DOC until the postmark date of the Notification of Compliance.

ii. If the Permittee submits the Notification of Compliance on or before the compliance date, the Permittee need not develop a DOC.

A.8.d. Certifications

The Permittee shall make the following certifications:

i. The Permittee shall certify the NIC and Progress Report as required by 40 CFR §63.1212.

ii. The responsible official for the Permittee, as designated for Title V purposes, shall certify the DOC (if it must be developed) and the Notification of Compliance.

A.8.e. Title V Operating Permit Modification

The Permittee shall meet the following conditions related to modifying this Title V operating permit:

A. EU-001 - DOWTHERM HEATER "A"

- **COMPLIANCE DEMONSTRATION**

A.8.e. **Title V Operating Permit Modification, Continued**

i. On or before the compliance date, the Permittee shall submit an application for a significant permit modification (SPM) to incorporate into its Title V operating permit the applicable requirements of the HWC **Phase II source standard**, a description of the affected source and activities subject to the standard, and a description of how the Permittee will meet the requirements of the standard, according to one of the following two conditions:
   (1) If the Permittee has not yet submitted the Notification of Compliance, the application shall contain the DOC.
   (2) If the Permittee has previously submitted the Notification of Compliance (or submits the Notification of Compliance at the same time as the application), the application shall be consistent with that notification.

ii. If the Permittee submits the Notification of Compliance after it has submitted the initial SPM application, an addendum to the SPM application is required to incorporate the operating parameter limits determined from performance testing. In this case, the Permittee shall submit an addendum to the SPM application (at the same time that the Notification of Compliance is submitted) to revise the SPM application as necessary to be consistent with the Notification of Compliance.

iii. On and after the compliance date, the Permittee shall operate consistent with the SPM application (as modified, when applicable, by the addendum to the SPM application) up until the time that the permit modification is finalized. After the permit modification is finalized, the Permittee shall operate consistent with the modified permit.

A.8.f. **Compliance Procedures**

The Permittee shall meet all applicable requirements of 40 CFR §63.1206(b).

A.8.g. **Operating Requirements**

The Permittee shall meet all applicable operating requirements as specified in 40 CFR §63.1206(c).

A.8.h. **Testing Requirements**

i. The Permittee shall comply with the provisions of 40 CFR §§63.7(b) and (c) and 63.8(e) [as modified by 40 CFR 63.1207(e)] for notification of performance tests and CMS performance evaluations, and for approval of test plans and CMS performance evaluation plans.

ii. The Permittee shall conduct all performance tests according to the requirements of 40 CFR §§63.1207 and 63.1208.

A.8.i. **Monitoring Requirements**

The Permittee shall meet all applicable monitoring requirements as specified in 40 CFR §63.1209.

A.8.j. **Notifications**

The Permittee shall meet all applicable notification requirements as specified in 40 CFR §63.1210.

A.8.k. **Record keeping and Reporting Requirements**

The Permittee shall meet all applicable record keeping and reporting requirements as specified in 40 CFR §63.1211.

Section III: Applicable Requirements and Compliance Demonstration

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number	F / S
VOC	Styron® Plant: ▪ EU-002A (Zinc Feed Tank) ▪ EU-002B (Zinc Mix Tank) ▪ EU-002C (Seal Flush Tank) ▪ EU-002D (Extrusion Dies Exhaust Vent) ▪ EU-001F (Styron®/Magnum® Recycle Tank)	**Order No. 8011**: (a) Less than or equal to 8.147 TPY (b) Less than or equal to 0.12 lb VOC/1000 lb product over any 3-hour period representative of normal plant operation. (c) Emissions limitations specified above shall be achieved by the use of: surface condensers; or a system demonstrated to have a control efficiency equivalent to or greater than surface condensers, and approved by the Commissioner. **Permit No. 092-0010**: Less than or equal to 120,000 ton per year material production.	Order No. 8011 (RCSA §22a-174-20(y)) & Permit No. 092-0010	B.1	F
	Magnum® Plant: ▪ EU-003A (Wax Slurry Tank) ▪ EU-003B (Extrusion Die Exhaust Vent) ▪ EU-001F (Styron®/Magnum® Recycle Tank)	**Order No. 8011:** (a) Less than or equal to 4.867 TPY (b) Less than or equal to 0.12 lb VOC/1000 lb product over any 3-hour period representative of normal plant operations. (c) Emissions limitations specified above shall be achieved by the use of: surface condensers; or a system demonstrated to have a control efficiency equivalent to or greater than surface condensers, and approved by the Commissioner.			
VOC Leaks (Fugitive Losses)	Styron® Plant: ▪ GEU-001 ▪ GEU-002 Magnum® Plant: ▪ GEU-001 ▪ GEU-003	(a) The Permittee shall not cause, allow, or permit any evidence of leakage as determined in Paragraph "a", Condition B.1, "Monitoring & Testing Requirements." (b) If leakage occurs, the Permittee shall repair the leaking pump within 15 days after detection. (c) If leakage occurs in a valve, compressor, or safety relief valve, the Permittee shall repair the component within 15 days of detection. (d) The VOC concentration at safety/relief valves shall not exceed 1000 ppm. (e) The Permittee shall repair any fugitive emission source detected based on sight, smell, or sound, within 15 days after detection.	Order No. 8011 (RCSA §22a-174-20(x))	B.2	F

Section III: Applicable Requirements and Compliance Demonstration

B. GEU-001 - Styron® Plant & Magnum® Plant: EU-001A - EU-001MM Vented to Dowtherm Heater "A"
GEU-002 - Styron® Plant: EU-002A - EU-002C Vented to Atmosphere; EU-002D - EU-002E Vented to Styron® Demister
GEU-003 - Magnum® Plant: EU-003A Vented to Atmosphere; EU-003B - EU-003C Vented to Magnum® Demister

- **Applicable Requirements**

Table III.B: Applicable Requirements GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number	F/ S
VOC Leaks	Styron® Plant: GEU-001 & GEU-002 Magnum® Plant: GEU-001 & GEU-003	The Permittee shall install on each open-ended valve or line, a cap, blind flange, plug, or a second closed valve which must remain attached to seal the open ended valve at all times except during operations requiring process fluid flow through the open line.	Order No. 8011 (RCSA §22a-174-20(x))	B.2 Continued	F
VOC Storage	Styron® Plant: GEU-001 & GEU-002 Magnum® Plant: GEU-001 & GEU-003	(a) All stationary storage tanks, reservoirs, or other containers of more than 10,000-gallon capacity but less than 40,000-gallon capacity, containing any VOC with a vapor pressure of 1.5 PSI absolute or greater at operating temperatures, are required to have operational conservation vent valves. All tank vent control systems shall be maintained in such a condition as designed to prevent and minimize emissions in accordance with good engineering practices as specified by the American Society of Mechanical Engineers (ASME) Vessel Design Codes. (b) All changes in pressure and vacuum settings for any of the tank vent control systems will be submitted and approved by the Commissioner prior to implementing such changes. (c) For all stationary storage tanks greater than 40,000-gallon capacity compliance shall be demonstrated for all subject equipment pursuant to RCSA §22a-174-20(a)(2).	Order No. 8011	B.3	F
		(d) The Permittee shall not place, store or hold in any stationary storage vessel of more than 250-gallon capacity any volatile organic compound with a vapor pressure of 1.5 pounds per square inch or greater under actual storage conditions unless such vessel is equipped with a permanent "submerged fill pipe" with a discharge point eighteen (18) inches or less from the bottom of the storage vessel or is a pressure tank. (e) A pressure tank is capable of maintaining working pressures sufficient at all times to prevent vapor or gas loss to the atmosphere or is designed, and equipped, with one of the vapor loss control devices listed below: (1) A fixed roof and a floating roof; (2) A vapor recovery system; (3) Other equipment or means with an efficiency equal to that required under RCSA §22a-174-20(a)(2)(B); or (4) A floating roof consisting of a pontoon type, double deck type roof or external floating cover, which will rest on the surface of the liquid contents.	RCSA §22a-174-20(a)(3)		

Section III: Applicable Requirements and Compliance Demonstration

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number	F/ S
TSP	Magnum® Plant & Styron® Plant	The Permittee shall not cause or permit any materials to be handled, transported, or stored without taking reasonable precautions to prevent particulate matter from becoming airborne.	RCSA §22a-174-18(b)	B.4	S
HAP (State)	Magnum® Plant: ▪ EU-003A (Extrusion Die Demister Exhaust Vent) ▪ EU-001A (1st Devolatizer Condenser Vacuum Vent) ▪ EU-001DD (Condensers Vacuum Vent)	At any time the Magnum® Plant produces the impact acrylonitrile copolymer, **acrylonitrile** emissions from the Magnum® Condenser Vacuum Vent and the Magnum® Plant Extrusion Die Demister Exhaust Vent shall be less than the Maximum Allowable Stack Concentration (MASC) pursuant to RCSA §22a-174-29 "*Hazardous Air Pollutant*" Regulations. The enforceable limit of the MASC for acrylonitrile from the Condenser Vacuum Vent is 0.198 pounds per hour and for the Extruder Demister Die Exhaust Vent is 0.199 pounds per hour.	Order No. 8011 (RCSA §22a-174-29)	B.5	F

Section III: Applicable Requirements and Compliance Demonstration

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

NOTE: CONDITIONS B.6.1, B.6.2(1) – B.6.2(3), B.6.3, B.6.4(1) – B.6.4(15) ARE FEDERALLY ENFORCEABLE

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP* (Federal)	Styron® Plant and Magnum® Plant	The Permittee shall identify and categorize each storage vessel and process vent as one of the following: (a) **Storage Vessels**: (1) Group 1 Storage Vessel: (i) Acrylonitrile (Polystyrene process): (A) 38 m^3 ≤ Capacity < 75.7 m^3 and Vapor Pressure (VP) ≥ 14.2 kPa [10,038.5 gallons ≤ Capacity < 19,997.82 gallons and VP ≥ 2.06 PSI] (B) Capacity ≥ 75.7 m^3 and Vapor Pressure ≥ 1.9 kPa [Capacity ≥ 19,997.82 gallons and VP ≥ 0.276 PSI] (ii) Other: (A) Capacity ≤ 151 m^3 and Vapor Pressure ≥ 5.2 kPa (B) 75 ≤ Capacity ≤ 151 and VP ≥ 13.1 kPa (2) Group 2 Storage Vessel: A Storage Vessel that does not fall into Group 1. (b) **Process Vents:** (1) Group 1 Process Vent: A process vent for which the flow rate is greater than or equal to 0.005 scm/min, the total organic HAP concentration is greater than or equal to 50 ppmv, and the total resource effectiveness index value (calculated in accordance with 40 CFR §63.115) is less than or equal to 1.0. (2) Group 2 Process Vent: A process vent for which the flow rate is less than or equal to 0.005 scm/min, the total organic HAP concentration is less than or equal to 50 ppmv, and the total resource effectiveness index value (calculated in accordance with 40 CFR §63.115) is greater than 1.0. (3) Batch Process Vent: A point of emissions from a batch unit operation having a gaseous emissions stream with annual organic HAP emissions greater than 225 Kg/year. (i) Group 1 Batch Process Vent: A batch process vent releasing annual organic HAP emissions greater than 11,800 Kg/year (13 TPY) and with a cutoff flow rate, greater than or equal to the annual average flow rate. (ii) Group 2 Batch Process Vent: A batch process vent that does not fall within the definition of a Group 1 batch process vent. (4) Continuous Process Vent: A point of emissions from a continuous unit operation within an affected source having a gaseous emissions stream containing greater than 0.005 weight percent total organic HAP.	**40 CFR Part 63, Subpart JJJ** **"*NEHSAP for Group IV Polymers & Resins*"** 40 CFR §63.1312 *Definitions*	B.6.1

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	(Group 1) EU-001I (Group 2) EU-001F EU-001G	**Storage Vessels**: The Permittee shall comply with the requirements of Paragraphs (a)(1), (a)(2), and (a)(3) of Condition B.6.2(1) of this Title V operating permit: (a) (1) Each Group 1 storage vessel storing a liquid for which the maximum true vapor pressure of the total organic hazardous air pollutants in the liquid is less than 76.6 kPa, the Permittee shall reduce HAP emissions to the atmosphere either by operating and maintaining a fixed roof and internal floating roof, an external floating roof, an external floating roof converted to an internal floating roof, or a closed vent system and control device, or routing the emissions to a process or a fuel gas system in accordance with Condition B.6.2(2) (40 CFR §63.119(b) (c) (d) (e) or (f)). (2) Each Group 1 storage vessel storing a liquid for which the maximum true vapor pressure of the total organic hazardous air pollutants in the liquid is greater than or equal to 76.6 kPa, the Permittee shall operate and maintain a closed vent system and control device meeting the requirements specified in 40 CFR §63.119(e) or route the emissions to a process or a fuel gas system as specified in Paragraph (b), Condition B.6.2(2) (40 CFR §63.119(f)). (3) For each Group 2 storage vessel the Permittee shall comply with the record keeping requirements in Paragraph "b", Conditions B.6.1 and B.6.2(1) - B.6.2(3), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.123(a)) and is exempt from provisions in Conditions B.6.(2) - B.6.2(3) (40 CFR §63.119 - 63.123).	**40 CFR §63.1314** **(40 CFR Part 63, Subpart G "*SOCMI for Process Vents, Storage Vessels, Transfer Operations, and Wastewater*")** 40 CFR §63.119 "*Storage Vessels Provision - Reference Control Technology*"	B.6.2(1)
	(Group 1) EU-001I	(a) 40 CFR §63.119(e): The Permittee who elects to use a closed vent system and control device, to comply with the requirements above of Paragraphs (a)(1) and (a)(2), Condition B.6.2(1), Applicable Requirements, Table III.B shall comply with the requirements specified in Paragraphs (a)(1) through (a)(5), Condition B.6.2(2), Applicable Requirements, Table III.B of this Title V operating permit: (1) The control device shall be designed and operated to reduce inlet emissions of total organic HAP by 95% or greater [40 CFR §63.11(b)]. (2) If the Permittee can demonstrate that a control device installed on a storage vessel on or before December 31, 1992 is designed to reduce inlet emissions of total organic HAP by greater than or equal to 90% but less than 95%, then the control device is required to be operated to reduce inlet emissions of total organic HAP by 90% or greater. (3) Period of planned routine maintenance of the control device, during which the control device does not meet the specifications of Paragraph (a)(1) or (a)(2) above, Condition B.6.2(2), Table III.B of this Title V operating permit as applicable, shall not exceed 240 hours per year.		B.6.2(2)

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	(Group I) EU-001I	(4) The specifications and requirements in Paragraphs (a)(1) and (a)(2), Condition B.6.2(2), Table III.B of this Title V operating permit, for control devices do not apply during periods of planned routine maintenance. (5) The specifications and requirements in Paragraphs (a)(1) and (a)(2), Condition B.6.2(2), Table III.B of this Title V operating permit for control devices do not apply during a control system malfunction. (6) The Permittee may use a combination of control devices to achieve the required reduction of total organic HAP specified in Paragraph (a)(1), Condition B.6.2(2), Table III.B of this Title V operating permit. The Permittee may use a combination of control devices installed on a storage vessel on or before December 31, 1992 to achieve the required reduction of total organic HAPs specified in Paragraph (a)(2), Condition B.6.2(2), Table III.B of this Title V operating permit.	**40 CFR 63.1314 (Subpart G)** 40 CFR §63.119 "*Storage Vessels Provision - Reference Control Technology*"	B.6.2(2)
	(Group 1) EU-001I	(a) To demonstrate compliance with Paragraph (a), Condition B.6.2(2) (40 CFR §63.119(e)) using a control device other than a flare, the Permittee shall comply with the requirements in Paragraphs (a)(1) - (a)(2), Condition B.6.2(3), Table III.B of this Title V operating permit. (1) The Permittee shall either prepare a design evaluation, which includes the information specified in Paragraph (a)(1)(i), Condition B.6.2(3) or submit the results of a performance test as described in Paragraph (a)(1)(ii), Condition B.6.2(3), of this Title V operating permit. (i) The design evaluation shall include documentation demonstrating that the control device being used achieves the required control efficiency during reasonably expected maximum filling rate. This documentation is to include a description of the gas stream which enters the control device, including flow and organic HAP content under varying liquid level conditions, and the information specified in Paragraphs (a)(1)(i)(A) - (a)(1)(i)(E), Condition B.6.2(3), Table III.B of this Title V operating permit as applicable. (A) If the control device receives vapors, gases or liquids, other than fuels, from emission points other than storage vessels subject to this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids, other than fuels, received by the control device. (B) If an enclosed combustion device with a minimum residence time of 0.5 seconds and a minimum temperature of 760 °C is used to meet the emission reduction requirement specified in Paragraph (a)(1) or (a)(2), Condition B.6.2(2), Table III.B (40 §63.119(e)(1) or (e)(2)), as applicable, documentation that those conditions exist is sufficient to meet the requirements of Paragraph (a)(1)(i), Condition B.6.2(3), Table III.B of this Title V operating permit. (C) Except as provided in Paragraph (a)(1)(i)(B), Condition B.6.2(3), Table III.B of this Title V operating permit for thermal incinerators, the design evaluation shall include the auto-ignition,	**40 CFR §63.1314 (Subpart G)** 40 CFR §63.120 "*Storage Vessels Provisions - Procedures to Determine Compliance*"	B.6.2(3)

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	(Group 1) EU-001I	temperature of the organic HAP, the flow rate of the organic HAP emission stream, the combustion temperature, and the residence time at the combustion temperature. (D) For carbon adsorbers, the design evaluation shall include the affinity of the organic HAP vapors for carbon, the amount of carbon in each bed, the number of beds, the humidity of the feed gases, the temperature of the feed gases, the flow rate of the organic HAP emission stream, the desorption schedule, the regeneration stream pressure or temperature, and the flow rate of the regeneration stream. For vacuum desorption, pressure drop shall be included. (E) For condensers, the design evaluation shall include the final temperature of the organic HAP vapors, the type of condenser, and the design flow rate of the organic HAP emission stream. (ii) The Permittee is not required to prepare a design evaluation for the control device as described in Paragraph (a)(1)(i), Condition B.6.2(3), Table III.B if the performance tests meets the criteria specified in Paragraphs (a)(1)(ii)(A) and (a)(1)(ii)(B), Condition B.6.2(3), Table III.B of this Title V operating permit. (A) The performance test demonstrates that the control device achieves greater than or equal to the required control efficiency specified in Paragraph (a)(1) or (a)(2), Condition B.6.2(2), Table III.B of this Title V operating permit [40 CFR §63.119(e)(1) or (e)(2)], as applicable; and (B) The performance test is submitted as part of the Notification of Compliance Status required by 40 CFR §63.151(b) of Subpart G. (2) The Permittee shall submit, as part of the Notification of Compliance Status required by 40 CFR §63.151(b) of Subpart G, a monitoring plan containing the information specified in Paragraph (a)(2)(i) of this section and in either Paragraph (a)(2)(ii) or (a)(2)(iii), Condition B.6.2(3), Table III.B of this Title V operating permit. (i) A description of the parameter or parameters to be monitored to ensure that the control device is being properly operated and maintained, an explanation of the criteria used for selection of that parameter (or parameters), and the frequency with which monitoring will be performed (e.g., when the liquid level in the storage vessel is being raised); and either (ii) The documentation specified in Paragraph (a)(1)(i), Condition B.6.2(3), Table III.B of this Title V operating permit if the Permittee elects to prepare a design evaluation; or	**40 CFR §63.1314** **(Subpart G)** 40 CFR §63.120 "*Storage Vessels Provisions - Procedures to Determine Compliance*"	B.6.2(3) Continued

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	(Group 1) EU-001I	(iii) The information specified in Paragraph (a)(2)(iii)(A) and (B), Condition B.6.2(3), Table III.B of this Title V operating permit if the Permittee elects to submit the results of a performance test. (A) Identification of the storage vessel and control device for which the performance test will be submitted, and (B) Identification of the emission point(s) that share the control device with the storage vessel and for which the performance test will be conducted. (3) The Permittee shall submit, as part of the Notification of Compliance Status required by 40 CFR §63.152(b) of Subpart G, the information specified in Paragraphs (a)(3)(i) and, if applicable, (a)(3)(ii), Condition B.6.2(3). (i) The operating range for each monitoring parameter identified in the monitoring plan. The specified operating range shall represent the conditions for which the control device is being properly operated and maintained. (ii) Results of the performance test described in Paragraph (a)(1)(ii), Condition B.6.2(3), Table III.B of this Title V operating permit. (4) The Permittee shall demonstrate compliance with the requirements of Paragraph (a)(3), Condition B.6.2(2), Table III.B of this Title V operating permit (40 CFR §63.119(e)(3)) (planned routine maintenance of a control device, during which the control device does not meet the specifications of Paragraph (a)(1) or (a)(2), Condition B.6.2(2) [40 CFR §63.119(e)(1) or (e)(2)], as applicable, shall not exceed 240 hours per year) by including in each Periodic Report required by 40 CFR §63.152(c) of Subpart G the information specified in 40 CFR §63.122(g)(1) of Subpart G. (5) The Permittee shall monitor the parameters specified in the Notification of Compliance Status required in 40 CFR §63.152(b) of Subpart G or in the operating permit and shall operate and maintain the control device such that the monitored parameters remain within the ranges specified in the Notification of Compliance Status. (6) Except as provided in Paragraph (a)(7), Condition B.6.2(3), Table III.B of this Title V operating permit each closed vent system shall be inspected as specified in 40 CFR §63.148 of Subpart G. The initial and annual inspections required by 40 CFR §63.148(b) of Subpart G shall be done during filling of the storage vessel. (7) For any fixed roof tank and closed vent system that are operated and maintained under negative pressure, the Permittee is not required to comply with the requirements specified in 40 CFR §63.148 of Subpart G.	**40 CFR §63.1314** **(Subpart G)** 40 CFR §63.120 "*Storage Vessels Provisions - Procedures to Determine Compliance*"	B.6.2(3) Continued

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

▪ **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Magnum® Plant (EU-001J EU-003C EU-001K)	**Batch Process Vents:** (a) Batch process vent determination = **Group 2** [40 CFR §63.1323]. (b) Batch process vent annual emissions of organic HAP shall not exceed 11,800 Kg/year (13 tons/year) [40 CFR §§63.1322(g) & 63.1323(d)]. (c) The Permittee shall establish a batch cycle limitation that ensures emissions do not exceed 11,800 Kg/year; and comply with the record keeping requirements in Paragraph "a", Condition B.6.3, Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.1326(d)(1)) and the reporting requirements in Paragraph "b", Condition B.6.3, Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.1327(a)(2), (b), and (c)].	**40 CFR §§63.1321 - 63.1323** (**Subpart JJJ**) "*Batch Process Vents Provisions*"	B.6.3

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	**Standards: General [40 CFR §63.162]:** (a) The provisions of Conditions B.6.4(1) - B.6.4(15), Table III.B of this Title V operating permit apply to pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, instrumentation systems, and control devices. (b) Each piece of equipment subject to Conditions B.6.4(1) - B.6.4(15), Table III.B of this Title V operating permit shall be identified such that it can be distinguished readily from equipment that is not subject to this Condition [40 CFR §63.162]. (c) Equipment that is in vacuum service is excluded from the requirements in Condition B.6.4(1) - B.6.4(15), Table III.B of this Title V operating permit. (d) When each leak is detected, the following requirements apply: (1) A weatherproof and readily visible identification marked with the equipment identification number, shall be attached to the leaking equipment. (2) The identification on a valve may be removed after it has been monitored as specified in Condition B.6.4(7), Table III.B, of this Title V operating permit and no leak has been detected during the follow-up monitoring. (3) The identification which has been placed on equipment determined to have a leak, except for a valve or for a connector, may be removed after it is repaired. (e) All terms that define a period of time for completion of required tasks refer to the standard calendar period. (f) Where the Permittee is required to repair leaks by a specified time after the leak is detected, it is a violation of this Title V operating permit and 40 CFR Part 63, Subpart H to fail to take action to repair the leaks within the specified time. If action is taken to repair the leaks within the specified time, failure of that action to successfully repair the leak is not a violation. However, if the repairs are unsuccessful, the Permittee shall take further actions as required in this Conditions B.6.4(1) - B.6.4(15), Table III.B of this Title V operating permit.	**40 CFR §63.1331** **(40 CFR Part 63, Subpart H, "*Equipment Leaks*")** 40 CFR §63.162 "*Standards: General*"	B.6.4(1)
		The following provisions apply to each pump that is in light liquid service (light liquid service means that a piece of equipment in organic hazardous air pollutant service contains a liquid that meets the following conditions: The vapor pressure of one or more of the organic compounds is greater than 0.3 Kilopascals at 20 °C, the total organic concentration of the pure organic compounds constituents having a vapor pressure greater than 0.3 Kilopascals at 20 °C is equal to or greater than 20% by weight of the total process stream, and the fluid is a liquid at operating conditions):	**40 CFR §63.1331** **(Subpart H)** 40 CFR §63.163 "*Standards: Pumps in Light Liquid Service*"	B.6.4(2)

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(a) The Permittee shall monitor each pump monthly to detect leaks by the method specified in Paragraph "a.i", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. (b) Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected [40 CFR §63.163(b)(3)] (c) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected [40 CFR §63.163(c)(1)]. (d) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not limited to, the following practices where practicable [40 CFR §63.163(c)(2)]: (1) Tightening of packing gland nuts. (2) Ensuring that the seal flush is operating at design pressure and temperature. (e) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements above , provided the following requirements are met [40 CFR §63.163(e)]: (1) Each dual mechanical seal system is operated with the barrier fluid at a pressure that is at all time greater than the pump stuffing box pressure; or (2) Is equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with Condition B.6.4(11), Table III.B of this Title V operating permit; or is equipped with a closed-loop system that purges the barrier fluid into a process stream. (3) The barrier fluid is not in light liquid service. (4) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both. (5) Each pump is checked by visual inspection each calendar week for indications of liquid dripping from the pump seal. **For an affected source producing polystyrene resin, the indications of liquids dripping from bleed ports in pumps in light liquid service shall not be considered to be a leak. A bleed port is a technologically-required feature of the pump or seal whereby polymer fluid used to provide lubrication and/or cooling of the pump exits the pump, thereby resulting in a visible dripping of fluid [40 CFR §63.1331(a)(1)].** If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the pump shall be monitored as specified in Paragraph "a.i", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit to determine if there is a leak of organic HAP in the barrier fluid. (6) If an instrument reading of 1,000 ppm or greater is measured, a leak is detected. (7) Each sensor is observed daily or is equipped with an alarm unless the pump is located within the boundary of an unmanned plant site.	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.163 "*Standards: Pumps in Light Liquid Service*"	B.6.4(2) Continued

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(8) The Permittee determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both. (9) If indications of liquids dripping from the pump seal exceed the criteria above or the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected. (10) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected. (11) A first attempt at repair shall be made no later than 5 calendar days after it is detected. (f) Any pump that is designed with no externally actuated shaft penetrating the pump housing is exempt from Paragraphs (a) - (c), Condition B.6.4(2), Table III.B of this Title V operating permit. (g) Any pump equipped with a closed vent system capable of capturing and transporting any leakage from the seal(s) to a process or to a fuel gas system or to a control device is exempt from Paragraphs (b) - (e), Condition B.6.4(2), Table III.B of this Title V operating permit (40 CFR §63.163(b) - (e)). (h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of Paragraphs (b)(3) and (e)(4), Condition B.6.4(2), Table III.B of this Title V operating permit and the daily requirements of Paragraph (e)(5), Condition B.6.4(2), Table III.B of this Title V operating permit provided that each pump is visually inspected as often as practicable and at least monthly. (i) If more than 90% of the pumps at a process unit meet the criteria in either Paragraph (d) or Paragraph (f), Condition B.6.4(2), Table III.B the process unit is exempt from Paragraph (d), Condition B.6.4(2), Table III.B of this Title V operating permit. (j) Any pump that is designated as describe in Paragraph "b.ii.(7)(A)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration , Section III.B, of this Title V operating permit as an unsafe-to-monitor pump is exempt from Paragraphs (b) - (e), Condition B.6.4(2), Table III.B of this Title V operating permit if: (1) The Permittee determines that the pump is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence; and (2) The Permittee has a written plan that requires monitoring of the pump as frequently as practical during safe-to-monitor times, but no more frequently than the periodic monitoring schedule otherwise applicable.	**40 CFR §63.1331** **(Subpart H)** 40 CFR §63.163 "*Standards: Pumps in Light Liquid Service*"	B.6.4(2) Continued

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in Paragraphs (h) and (i), Condition B.6.4(3), Table III.B of this Title V operating permit. (b) Each compressor seal system shall be: (1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or (2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system to a control device; or (3) Equipped with a closed-loop system that purges the barrier fluid directly into a process stream. (c) The barrier fluid shall not be in light liquid service. (d) Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system or both. (e) Each sensor shall be observed daily or shall be equipped with an alarm unless the compressor is located within the boundary of an unmanned plant site. The Permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. (f) If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion above, a leak is detected. (g) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (h) A compressor is exempt from Paragraphs (a) - (f), Condition B.6.4(3), Table III.B of this Title V operating permit if it is equipped with a closed-vent system to capture and transport leakage from the compressor drive shaft seal back to a process or a fuel gas system or to a control device that complies with Condition B.6.4(11), Table III.B of this Title V operating permit. (i) Any compressor that is designated, to operate with an instrument reading of less than 500 ppm above background, is exempt from the requirements of Paragraphs (a) - (h), Condition B.6.4(3), Table III.B of this Title V operating permit if the compressor: (1) Is demonstrated to be operating with an instrument reading of less than 500 ppm above background, as measured [50 CFR §63.180(c)]. (2) Is tested for compliance with Paragraph (i)(1), Condition B.6.4(3), Table III.B of this Title V operating permit initially upon designation, annually, and at other times requested by the Administrator.	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.164 "*Standards: Compressors*"	B.6.4(3)

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with an instrument reading of less than 500 ppm above background except as provided in Paragraph (b), Condition B.6.4(4), Table III.B of this Title V operating permit. (b) After each pressure release, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release. No later than 5 calendar days after the pressure release and being returned to organic HAP service, the pressure relief device shall be monitored to confirm the condition indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Paragraph "a.ii", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. (c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in Condition B.6.4(11), Table III.B of this Title V operating permit (40 CFR §63.172) is exempt from the above requirements. (d) (1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements above in Paragraphs (a) and (b), Condition B.6.4(4), Table III.B provided the Permittee complies with Paragraph (d)(2), Condition B.6.4(4), Table III.B of this Title V operating permit. (2) After each pressure release, a rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release.	**40 CFR §63.1331** **(Subpart H)** 40 CFR §63.165 "*Standards: Pressure Relief Devices in Gas/Vapor Services*"	B.6.4(4)
		(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system. Gases displaced during filling of the sample container are not required to be collected or captured. (b) Each closed-purged, closed-loop, or closed-vent system shall: (1) Return the purged process fluid directly to the process line; or (2) Collect and recycle the purged process fluid to a process; or (3) Be designed and operated to capture and transport the purged process fluid to a control device that complies with the requirements of Condition B.6.4(11), Table III.B of this Title V operating permit; or (4) Collect, store, and transport the purged process fluid to a system identified in Paragraphs (4)(i) - (4)(iii), Condition B.6.4(5), Table III.B of this Title V operating permit (below): (i) A waste management unit operated in compliance with 40 CFR Part 63, Subpart G; (ii) A treatment, storage, or disposal facility subject to 40 CFR Part 262, 264, 265, or 266; or (iii) A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR Part 261. (c) In-situ sampling systems and systems without purges are exempt from Paragraphs (a) and (b), Condition B.6.4(5), Table III.B of this Title V operating permit.	**40 CFR §63.1331** **(Subpart H)** 40 CFR §63.166 "*Standards: Sampling Connection Systems*"	B.6.4(5)

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(a) (1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. (2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair. (b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. (c) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with Paragraph (a), Condition B.6.4(6), Table III.B of this Title V operating permit at all other times. (d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from Paragraphs (a), (b), and (c), Condition B.6.4(6), Table III.B of this Title V operating permit. (e) Open-ended valves or lines containing materials which would autocatalytically polymerize or, would present an explosion, serious over pressure, or other safety hazard if capped or equipped with a double block and bleed system are exempt from the requirements of Paragraphs (a) - (c), Condition B.6.4(6), Table III.B of this Title V operating permit.	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.167 "*Standards: Open-ended Valves or Lines*"	B.6.4(6)
		(a) The provisions in Condition 6.5(7), Table III.B of this Title V operating permit apply to valves that are either in gas service or in light liquid service. (1) The provision are to be implemented on the dates below (set forth below in 40 CFR Part 63, Subpart JJJ). (i) The phases of compliance (for existing sources) for this standard are; (A) **Phase I**, beginning on the compliance date (**September 12, 1999**); (B) **Phase II**, beginning no later than 1 year after the compliance date (**September 12, 2000**); and (C) **Phase III**, beginning no later than 2.5 years after the compliance date (**March 12, 2002**). (2) The use of monitoring data generated before April 22, 1994 to qualify for less frequent monitoring is governed by the provisions of Paragraph "a.i.(6)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. (b) The Permittee shall monitor all valves at the intervals specified in Paragraphs (c) and (d), Condition B.6.4(7), Table III.B of this Title V operating permit. (1) The valves shall be monitored to detect leaks by using Method 21 of 40 CFR Part 60, Appendix A. Detection instrument shall meet the performance criteria of Method 21 of 40 CFR Part 60. (2) The instrument reading that defines a leak in each phase of the standard is: (i) For Phase I, an instrument reading of 10,000 ppm or greater. (ii) For Phase II, and instrument reading of 500 ppm or greater. (iii) For Phase III, an instrument reading of 500 ppm or greater.	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.168 "*Standards: Valves in Gas/Vapor Service and in Light Liquid Service*"	B.6.4(7)

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(c) In Phase III, the Permittee shall monitor valves for leaks at the following intervals: (1) At process units with 2% or greater leaking valves, calculated according to the equation in Paragraph (d), Condition B.6.4(7), Table III.B of this Title V operating permit, the Permittee shall either: (i) Monitor each valve once per month; or (ii) Within the first year after the onset of Phase III, implement a quality improvement program for valves and monitor quarterly. (2) At process units with less than 2% leaking valves, the Permittee shall monitor each valve once each quarter. (3) At process units with less than 1% leaking valves, the Permittee may elect to monitor each valve once every 2 quarters. (4) At process units with less than 0.5% leaking valves, the Permittee may elect to monitor each valve once every 4 quarters. (d) (1) Percent leaking valves at a process unit shall be determined by the following equation: $\%V_L = (V_L / (V_T + V_C)) \times 100$ Where, $\%V_L$ = % leaking valves as determined through periodic monitoring required above V_L = number of valves found leaking excluding non-repairable valves as provided in Paragraph (d)(3)(i), Condition B.6.4(7) of this Title V operating permit. V_T = Total valves monitored, in a monitoring period excluding valves monitored V_C = Optional credit for removed valves = 0.67 x net number (total removed - total added). If credits are not taken $V_C = 0$. (2) For use in determining monitoring frequency, the percent leaking valves shall be calculated as a rolling average of two consecutive monitoring periods for monthly, quarterly, or semiannual monitoring programs; and as an average of any there out of four consecutive monitoring period for annual monitoring programs. (3) Non-repairable valves shall be included in the calculation of percent leaking valves the first time the valve is identified as leaking and non-repairable and as required to comply with Paragraph (d)(3)(ii), Condition B.6.4(7), Table III.B of this Title V operating permit. Otherwise, a number of non-repairable valves up to a maximum of 1% in organic HAP service at a process unit may be excluded from calculation of percent leaking valves for subsequent monitoring periods. If the number of non-repairable valves exceeds 1% of the total number of valves in organic HAP service at a process unit, the number of non-repairable valves exceeding 1% of the total number of valves shall be included in the calculation of percent leaking valves.	**40 CFR §63.1331** **(Subpart H)** 40 CFR §63.168 "*Standards: Valves in Gas/Vapor Service and in Light Liquid Service*"	B.6.4(7) Continued

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(e) (1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Condition B.6.4(10), Table III.B of this Title V operating permit. (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (3) When a leak has been repaired, the valve shall be monitored at least once within the first 3-months after its repair. (i) The monitoring shall be conducted as specified in Paragraph "a", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit as appropriate, to determine whether the valve has resumed leaking. (ii) Periodic monitoring may be used to satisfy the requirements of Paragraph (e)(3), Condition B.6.4(7), Table III.B of this Title V operating permit if the timing of the monitoring period coincides with the time specified in Paragraph (e)(3), Condition B.6.4(7), Table III.B of this Title V operating permit. Alternatively, other monitoring may be performed to satisfy the requirements regardless of whether the timing of the monitoring period for periodic monitoring coincides with the time specified in Paragraph (e)(3), Condition B.6.4(7), Table III.B of this Title V operating permit. (iii) If a leak is detected by monitoring that is conducted pursuant to this paragraph, the Permittee shall follow the provisions of Paragraphs (e)(3)(iii)(A) and (e)(3)(iii)(B), Condition B.6.4(7), Table III.B of this Title V operating permit to determine whether that valve must be counted as a leaking valve. (A) If the Permittee elected to use periodic monitoring, then the valve shall be counted as a leaking valve. (B) If the Permittee elected to use other monitoring, then the valve shall be counted as a leaking valve unless it is repaired and shown by periodic monitoring not to be leaking. (f) First attempts at repair include, but are no limited to, the following practices where practicable: (1) Tightening of bonnet bolts, (2) Replacement of bonnet bolts, (3) Tightening of packing gland nuts, and (4) Injection of lubricant into lubricated packing. (g) Any valve that is designated as described in Paragraph "b.ii.(7)(A)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.181(b)(7)(i)), as an unsafe-to-monitor valve is exempt from the requirements of Paragraphs (b) - (e), Condition B.6.4(7), Table III.B of this Title V operating permit if: (1) The Permittee determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Paragraphs (b) - (d), Condition B.6.4(7), Table III.B of this Title V operating permit. (2) The Permittee has a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitoring times.	**40 CFR §63.1331** **(Subpart H)** 40 CFR §63.168 "*Standards: Valves in Gas/Vapor Service and in Light Liquid Service*"	B.6.4(7) Continued

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(h) Any valve that is designated, as described in Paragraph "b.ii.(7)(B)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration , Section III.B of this Title V operating permit as a difficult-to-monitor valve is exempt from the requirements of Paragraphs (b) - (d), Condition B.6.4(7), Table III.B of this Title V operating permit if: (1) The Permittee determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner; (2) The process unit within which the valve is located is an existing source or the Permittee designates less than 3% of the total number of valves in a new source as difficult-to-monitor; and (3) The Permittee follows a written plan that requires monitoring of the valve at least once per calendar year. (i) Any equipment located with fewer than 250 valves in organic HAP service is exempt from the requirements for monthly monitoring and a quality improvement program specified in Paragraph (d)(1), Condition B.6.4(7), Table III.B of this Title V operating permit. Instead, the Permittee shall monitor each valve in organic HAP service for leaks once each quarter, or comply with Paragraph (d)(3) or (d)(4) except as provided in Paragraphs (h) and (i), Condition B.6.4(7), Table III.B of this Title V operating permit.	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.168 "*Standards: Valves in Gas/Vapor Service and in Light Liquid Service*"	B.6.4(7) Continued
		(a) Pumps, valves, connectors, and agitators in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and instrumentation systems shall be monitored within 5 calendar days by the method specified in Paragraph "a", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit if evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method. If such a potential leak is repaired as required in Paragraphs (c) and (d), Condition B.6.4(8), Table III.B of this Title V operating permit, it is not necessary to monitor the system for leaks by the method specified in Paragraph "a", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration , Section III.B of this Title V operating permit: (b) If an instrument reading of 10,000 ppm or greater for agitators, 5,000 ppm or greater for pumps handling polymerizing monomers, 2,000 ppm or greater for pumps subject to Phase III (compliance phase starting March 12, 2002 – see Paragraph (a)(1)(i), Condition B.6.4(7), Table III.B of this Title V operating permit), or 500 ppm or greater for valves, connectors, instrumentation systems, and pressure relief devices is measured, a leak is detected. (c) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected except as provided in Condition B.6.4(10), Table III.B, of this Title V operating permit. (2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (3) For equipment identified in Paragraph (a), Condition B.6.4(8), Table III.B (above) of this Title V operating permit that is not monitored, repaired shall mean that the visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated; that no bubbles are observed at potential leak sites during a leak check using soap solution; or that the system will hold a test pressure. (d) First attempts at repair include, but are not limited, to the practices Paragraph (d), Condition B.6.4(2) and Paragraph (f), Condition B.6.4(7), Table III.B of this Title V operating permit for pumps and valves, respectively.	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.169 *"Standards: Pumps, Valves, Connectors, and Agitators in Heavy Liquid Service; Instrumentation Systems, and Pressure Relief Devices in Liquid Service"*	B.6.4(8)

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	The provisions set forth in 40 CFR §63.170 do not apply in accordance with 40 CFR §63.1331(a)(9).	**40 CFR §63.1331** **(Subpart H)** 40 CFR §63.170 "*Standards: Surge Control Vessels and Bottoms Receivers*"	B.6.4(9)
		(a) Delay of repair of equipment for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur by the end of the next process unit shutdown. (b) Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in organic HAP service. (c) Delay of repair for valves, connectors, and agitators is also allowed if: (1) The Permittee determines that emissions for purge material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and (2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with Condition B.6.4(11), Table III.B of this Title V operating permit. (d) Delay of repair for pumps is also allowed if: (1) Repair requires replacing the existing seal design with a new system that the Permittee has determined under the provisions of Paragraph (c), Condition B.6.4(15), Table III.B of this Title V operating permit will provide better performance or; (i) A dual mechanical seal system that meets the requirements of Condition B.6.4(2), Table III.B, (ii) A pump that meets the requirements of Condition B.6.4(2), Table III.B, or (iii) A closed-vent system and control device that meets the requirements of Condition B.6.4(2), Table III.B of this Title V operating permit; and (2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected. (e) Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the second process unit shutdown will not be allowed unless the third process unit shutdown occurs sooner than 6 months after the first process unit shutdown.	**40 CFR §63.1331** **(Subpart H)** 40 CFR §63.171 "*Standards: Delay of Repair*"	B.6.4(10)

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(a) Recovery or recapture devices (e.g. condensers and absorbers) shall be designed and operated to recover the organic hazardous air pollutant emissions or VOC emissions vented to them with an efficiency of 95% or greater, or to an exit concentration of 20 ppmv, whichever is less stringent. (b) Enclosed combustion devices shall be designed and operated to reduce the organic hazardous air pollutant emissions or VOC emissions vented to them with an efficiency of 95% or greater, or to an exit concentration of 20 ppmvd, correct to 3% oxygen, whichever is less stringent, or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 ˚ C. (c) The Permittee shall ensure control devices that are used to comply with the provisions of Conditions B.6.4(1) - B.6.4(15), Table III.B of this Title V operating permit (Subpart H) shall monitor these control devices to ensure that they are operated and maintained in conformance with their design. (d) Except as provided in Paragraphs (h) and (i), Condition B.6.4(11), Table III.B, each closed vent system shall be inspected according to the procedures and schedule in Paragraph (d)(1), Condition B.6.4(11), Table III.B of this Title V operating permit. (1) If the closed-vent system is constructed of hard-piping, the Permittee shall: (i) Conduct an initial inspection according to the procedures in Paragraph (e), Condition B.6.4(11), Table III.B of this Title V operating permit, and (ii) Conduct annual visual inspection for visible, audible, or olfactory indications of leaks. (e) Each closed-vent system shall be inspected according to the procedures in Paragraph "a.ii", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.180(b)). (f) Leaks, as indicated by an instrument reading greater than 500 ppm above background or by visual inspections, shall be repaired as soon as practicable, except as provided in Paragraph (g), Condition B.6.4(11), Table III.B of this Title V operating permit. (1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. (2) Repair shall be completed no later than 15 calendar days after the leak is detected, except as provided in Paragraph (g), Condition B.6.4(11), Table III.B of this Title V operating permit. (g) Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the Permittee determine that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. (h) Any parts of the closed-vent system that are designated, as described in Paragraph "b.ii.(7)(A)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B (40 CFR §63.181(b)(7)(i)) of this Title V operating permit, as unsafe to inspect are exempt from the inspection requirements of Paragraph (d)(1), Condition B.6.4(11), Table III.B of this Title V operating permit if: (1) The Permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger; and	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.172 "*Standards: Closed-vent Systems and Control Devices*"	B.6.4(11)

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(2) The Permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times, but not more frequently than annually. (i) Any parts of the closed-vent system that are designated, as described in Paragraph "b.ii.(7)(A)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.181(b)(7)(i)), as difficult to inspect are exempt from the inspection requirements of Paragraph (d)(1), Condition B.6.4(11), Table III.B of this Title V operating permit if: (1) The Permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and (2) The Permittee has a written plan that requires inspection of the equipment at least once every 5 years. (j) Whenever organic HAP emissions are vented to a closed-vent system or control device used to comply with the provisions of Conditions B.6.4(1) - B.6.4(15), Table III.B of this Title V operating permit (Subpart H), such system or control device shall be operating.	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.172 "*Standards: Closed-Vent Systems and Control Devices*"	B.6.4(11) Continued
		Note: *For an affected source producing polystyrene resin, the indications of liquids dripping from bleed ports in agitator seals in light liquid service shall not be considered to be a leak. A bleed port is a technologically-required feature of the pump or seal whereby polymer fluid used to provide lubrication and/or cooling of the agitator shaft exits the pump, thereby resulting in a visible dripping of fluid [40 CFR §63.1331(a)(1)].* (a) (1) Each agitator shall be monitored monthly to detect leaks by the methods specified in Paragraph "a.ii", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.180(b)). (2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. (b) (1) Each agitator shall be checked by visual inspection each calendar week for indications of liquids dripping from the agitator. (2) If there are indications of liquids dripping from the agitator, a leak is detected. (c) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected except as provided in Condition B.6.4(10), Table III.B of this Title V operating permit (40 CFR §63.171). (2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (d) Each agitator equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of Paragraph (a), Condition B.6.4(12), Table III.B of this Title V operating permit, provided the requirements specified in Paragraphs (d)(1) - (d)(6), Condition B.6.4(12), Table III.B of this Title V operating permit are met: (1) Each dual mechanical seal system is operated with the barrier fluid at a pressure that is at all times greater than the agitator stuffing box pressure; or equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of Condition B.6.4(11), Table III.B of this Title V operating permit (40 CFR §63.172).	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.173 "*Standards: Agitators in Gas/Vapor Service and in Light Liquid Service*"	B.6.4(12)

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(i) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of Condition B.6.4(11), Table III.B of this Title V operating permit (40 CFR §63.172). (2) The barrier fluid is not in light liquid organic HAP service. (3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both. (4) Each agitator is checked by visual inspection each calendar week for indications of liquids dripping from the agitator seal. (i) If there are indications of liquids dripping from the agitator seal at the time of the weekly inspection, the agitator shall be monitored as specified in Paragraph "a.ii", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.180(b)) to determine the presence of organic HAP in the barrier fluid. (ii) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. (5) Each sensor is observed daily or is equipped with an alarm unless the agitator is located within the boundary of an unmanned plant site. (6) (i) The Permittee determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both. (ii) If indications of liquids dripping from the agitator seal exceed the criteria established in Paragraph (d)(6)(i), Condition B.6.4(12), Table III.B, or if based on the criteria established in Paragraph (d)(6)(i) Condition B.6.4(12), Table III.B of this Title V operating permit, the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected. (iii) A first attempt at repair shall be made no later than 5 calendar days after it is detected, except as provided in Condition B.6.4(10), Table III.B of this Title V operating permit (40 CFR §63.171). (iv) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (e) Any agitator that is designed with no externally actuated shaft penetrating the agitator housing is exempt from Paragraphs (a) - (c), Condition B.6.4(12), Table III.B of this Title V operating permit. (f) Any agitator equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a process or fuel gas system or to a control device that complies with the requirements of Condition B.6.4(11), Table III.B of this Title V operating permit (40 CFR §63.172) is exempt from the requirements of Paragraphs (a) - (c), Condition B.6.4(12), Table III.B of this Title V operating permit.	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.173 "*Standards: Agitators in Gas/Vapor Service and in Light Liquid Service*"	B.6.4(12) Continued

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(g) Any agitator that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of Paragraphs (b)(1) and (d)(4), Condition B.6.4(12), Table III.B, and the daily requirements of Paragraph (d)(5), Condition B.6.4(12), Table III.B of this Title V operating permit, provided that each agitator is visually inspected as often as practical and at least once monthly. (h) Any agitator that is difficult-to-monitor is exempt from the requirements of Paragraphs (a) - (d), Condition B.6.4(12), Table III.B of this Title V operating permit if: (1) The Permittee determines that the agitator cannot be monitored without elevating the monitoring personnel more than two meters above a support surface or it is not accessible at anytime in a safe manner; (2) The process unit within which the agitator is located is an existing source or the Permittee designates less than 3% of the total number of agitators in a new source as difficult-to-monitor; and (3) The Permittee follows a written plan that requires monitoring of the agitator at least once per calendar year. (i) Any agitator that is obstructed by equipment or piping that prevents access to the agitator by a monitor probe is exempt from the monitoring requirements of Paragraphs (a) - (d), Condition B.6.4(12), Table III.B of this Title V operating. (j) Any agitator that is designated, as an unsafe-to-monitor agitator (described in Paragraph "b.ii.(7)(A)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.181(b)(7)(i)) is exempt from the requirements of Paragraphs (a) - (d), Condition B.6.4(12), Table III.B of this Title V operating if: (1) The Permittee determines that the agitator is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Paragraphs (a) - (d), Condition B.6.4(12), Table III.B of this Title V operating. (2) The Permittee has a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitoring times.	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.173 "*Standards: Agitators in Gas/Vapor Service and in Light Liquid Service*"	B.6.4(12) Continued
		(a) The Permittee shall monitor all connectors in gas/vapor and light liquid service, at the intervals specified in Paragraph (b), Condition B.6.4(13), Table III.B of this Title V operating permit. (1) The connectors shall be monitored to detect leaks by the method specified in Paragraph "a.ii", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.180(b)). (2) If an instrument reading of 5,000 ppm or greater is measured, a leak is detected. (b) The Permittee shall monitor for leaks at the intervals specified in either Paragraph (b)(1) or (b)(2) and in Paragraph (b)(3), Condition B.6.4(13), Table III.B of this Title V operating permit. (1) For each group of existing process units within an existing source, by no later than 12 months after the compliance date, the Permittee shall monitor all connectors, except as provided in Paragraphs (f) - (h), Condition B.6.4(13), Table III.B of this Title V operating permit. (2) For new sources, within the first 12 months after initial start-up or by no later than 12 months after the date of promulgation of a specific subpart that references Subpart H, whichever is later, the Permittee shall monitor all connectors except as provided in Paragraphs (f) - (h), Condition B.6.4(13), Table III.B of this Title V operating permit.	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.174 "*Standards: Connectors in Gas/Vapor Service and in Light Liquid Service*"	B.6.4(13)

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(3) After conducting the initial survey required in Paragraph (b)(1) or (b)(2), Condition B.6.4(13), Table III.B, the Permittee shall perform all subsequent monitoring of connectors at the frequencies specified in Paragraphs (b)(3)(i) - (b)(3)(v), Condition B.6.4(13), Table III.B except as provided in Paragraph (c)(2), Condition B.6.4(13), Table III.B of this Title V operating permit: (i) Once per year (i.e., 12-month period), if the percent leaking connectors in the process unit was 0.5% or greater during the last required annual or biennial monitoring period. (ii) Once every 2 years, if the percent leaking connectors was less than 0.5% during the last required monitoring period. The Permittee may comply with this paragraph by monitoring at least 40% of the connectors in the first year and the remainder of the connectors in the second year. The percent leaking connectors will be calculated for the total of all monitoring performed during the 2-year period. (iii) If the Permittee calculates less than 0.5% leaking connectors from a process unit in a biennial leak detection and repair program from the 2-year monitoring period, the Permittee may monitor the connectors one time every 4 years. The Permittee may comply with this paragraph by monitoring at least 20% of the connectors each year until all connectors have been monitored within 4 years. (iv) If a process unit complying with the requirements of Paragraph (b), Condition B.6.4(13), Table III.B of this Title V operating permit using a 4-year monitoring interval program has greater than or equal to 0.5% but less than 1% leaking connectors, the Permittee shall increase the monitoring frequency to one time every 2 years. The Permittee may comply with this paragraph by monitoring at least 40% of the connectors in the first year and the remainder of the connectors in the second year. The percent leaking connectors will be calculated for the total of all monitoring performed during the 2-year period. (v) If the process unit using a 4-year monitoring interval program has 1% or greater leaking connectors, the Permittee shall increase the monitoring frequency to one time per year. (c) (1) (i) Except as provided in Paragraph (c)(1)(i), Condition B.6.4(13), Table III.B of this Title V operating permit, each connector that has been opened or has otherwise had the seal broken shall be monitored for leaks when it is reconnected or within the first 3 months after being returned to organic HAP service. If the monitoring detects a leak, it shall be repaired according to the provisions of Paragraph (d), Condition B.6.4(13), Table III.B, unless it is determined to be non-repairable, in which case it is counted as a non-repairable connector for the purposes of Paragraph (i)(2), Condition B.6.4(13), Table III.B of this Title V operating permit. (ii) As an alternative to the requirements in Paragraph (c)(1)(i), Condition B.6.4(13), Table III.B of this Title V operating permit, the Permittee may choose not to monitor connectors that have been opened or otherwise had the seal broken. In this case, the Permittee may not count non-repairable connectors for the purpose of Paragraph (i)(2), Condition B.6.4(13), Table III.B of this Title V operating permit.	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.174 "*Standards: Connectors in Gas/Vapor Service and in Light Liquid Service*"	B.6.4(13) Continued

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	The Permittee shall calculate the percent leaking connectors for the monitoring period described in Paragraph (b), Condition B.6.4(13), Table III.B, by setting the non-repairable component, C_{AN}, in the equation in Paragraph (h)(2), Condition B.6.4(13), Table III.B of this Title V operating permit to zero for all monitoring periods. (2) As an alternative to Paragraph (b)(3), Condition B.6.4(13), Table III.B, each screwed connector 2 inches or less in nominal inside diameter installed in a process unit before the date specified in Paragraph (c)(2)(iii) or (c)(2)(iv), Condition B.6.4(13), Table III.B of this Title V operating permit may: (i) Comply with the requirements of Condition B.6.4(8), Table III.B (40 CFR §63.169), and (ii) Be monitored for leaks within the first 3 months after being returned to organic HAP service after having been opened or otherwise had the seal broken. If that monitoring detects a leak, it shall be repaired according to the provisions of Paragraph (d), Condition B.6.4(13), Table III.B of this Title V operating permit. (iii) For sources subject to 40 CFR Part 63 Subpart JJJ, the provisions of Paragraph (c)(2), Condition B.6.4(13), Table III.B of this Title V operating permit apply to screwed connectors installed before December 31, 1992. (iv) For sources not identified, the provisions of Paragraph (c)(2), Condition B.6.4(13), Table III.B of this Title V operating permit apply to screwed connectors installed before the date of proposal of the applicable subpart of this part that references Subpart H. (d) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Paragraph (g), Condition B.6.4(13), and in Condition B.6.4(10), Table III.B (40 CFR §63.171). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. (e) Any connector that is designated, as described in Paragraph "b.ii.(7)(A)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.181(b)(7)(i)) as an unsafe-to-monitor connector is exempt from the requirements of Paragraph (a), Condition B.6.4(13), Table III.B of this Title V operating permit if: (1) The Permittee determines that the connector is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Paragraphs (a) - (d), Condition B.6.4(13), Table III.B of this Title V operating permit. (2) The Permittee has a written plan that requires monitoring of the connector as frequently as practicable during safe-to-monitoring times. The Permittee follows a written plan that requires monitoring of the connector at least once per calendar year. (f) Any connector that is designated, as described in Paragraph "b.ii.(7)(C)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit as an unsafe-to-repair connector is exempt from the requirements of Paragraphs (a), (b), and (d), Condition B.6.4(13), Table III.B of this Title V operating permit if: (1) The Permittee determines that repair personnel would be exposed to an immediate danger as a consequence of complying with Paragraph (d), Condition B.6.4(13), Table III.B of this Title V operating permit; and (2) The connector will be repaired before the end of the next scheduled process unit shutdown.	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.174 "*Standards: Connectors in Gas/Vapor Service and in Light Liquid Service*"	B.6.4(13) Continued

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(g) (1) Any connector that is inaccessible or is ceramic or ceramic-lined, is exempt from the monitoring requirements of Paragraphs (a) and (c), Condition B.6.4(13), Table III.B and from the record keeping and reporting requirements of Paragraphs "b" and "c", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §§63.181 and 63.182). An inaccessible connector is one that is: (i) Buried; (ii) Insulated in a manner that prevents access to the connector by a monitor probe; (iii) Obstructed by equipment or piping that prevents access to the connector by a monitor probe; (iv) Unable to be reached from a wheeled scissors-lift or hydraulic-type scaffold which would allow access to connectors up to 7.6 meters (25 feet) above the ground; (v) Inaccessible because it would require elevating the monitoring personnel more than 2 meters above a permanent support surface or would require the erection of scaffold; or (vi) Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissors-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment. (2) If any inaccessible or ceramic or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the leak shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Condition B.6.4(10), Table III.B (40 CFR §63.171) and Paragraph (g), Condition B.6.4(13), Table III.B of this Title V operating permit. (3) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. (h) For use in determining the monitoring frequency, as specified in Paragraph (b), Condition B.6.4(13), Table III.B, the percent leaking connectors shall be calculated as specified in Paragraphs (h)(1) and (h)(2), Condition B.6.4(13), Table III.B of this Title V operating permit. (1) For the first monitoring period, use the following equation: $\% C_L = C_L / (C_T + C_C) \times 100$ Where: $\% C_L$ = Percent leaking connectors as determined through periodic monitoring required in Paragraphs (a) and (b), Condition B.6.4(13), Table III.B of this Title V operating permit. C_L = Number of connectors measured at 500 ppm or greater, by the method specified in Paragraph "a.ii", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.180(b)) C_T = Total number of monitored connectors in the process unit. C_C = Optional credit for removed connectors = 0.67 x net (i.e. total removed - total added) number of connectors in organic HAP service removed from the process unit after the compliance date. If credits are not taken, $C_C = 0$.	**40 CFR §63.1331** **(Subpart H)** 40 CFR §63.174 "*Standards: Connectors in Gas/Vapor Service and in Light Liquid Service*"	B.6.4(13) Continued

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(2) For subsequent monitoring periods, use the following equation: $\% C_L = [(C_L - C_{AN})/ (C_T + C_C)] \times 100$ Where: $\% C_L$ = Percent leaking connectors as determined through periodic monitoring required in Paragraphs (a) and (b), Condition B.6.4(13), Table III.B of this Title V operating permit. C_L = Number of connectors measured at 500 ppm or greater, by the method specified in Paragraph "a.ii", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.180(b)) C_{AN} = Number of allowable non-repairable connectors, as determined by monitoring required in Paragraphs (b)(3) and (c), Condition B.6.4(13), Table III.B of this Title V operating permit, not to exceed 2% of the total connector population, C_T. C_T = Total number of monitored connectors in the process unit. C_C = Optional credit for removed connectors = 0.67 x net (i.e. total removed - total added) number of connectors in organic HAP service removed from the process unit after the compliance date. If credits are not taken, $C_C = 0$. (i) If the Permittee eliminates a connector subject to monitoring under Paragraph (b), Condition B.6.4(13), Table III.B, the Permittee may receive credit for elimination of the connector, as described in Paragraph (i), Condition B.6.4(13), Table III.B, provided the requirements in Paragraph (i)(1) - (i)(4), Condition B.6.4(13), Table III.B of this Title V operating permit are met. (1) The connector was welded after the date of proposal of 40 CFR Part 63, Subpart JJJ. (2) The integrity of the weld is demonstrated by monitoring it according to the procedures in Paragraph "a.ii", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.180(b)) by testing using X-ray, acoustic monitoring, hydro-testing, or other applicable method. (3) Welds created after the date of proposal but before the date of promulgation (40 CFR Part 63, Subpart JJJ) are monitored or tested by 3 months after the compliance date. (4) Welds created after promulgation of 40 CFR Part 63, Subpart JJJ are monitored or tested within 3 months after being welded. (5) If an inadequate weld is found or the connector is not welded completely around the circumference, the connector is not considered a welded connector and is not exempt from the provisions of Conditions B.6.4(1) - B.6.4(15), Table III.B of this Title V operating permit (Subpart H).	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.174 "*Standards: Connectors in Gas/Vapor Service and in Light Liquid Service*"	B.6.4(13) Continued

B. GEU-001 - Styron® Plant & Magnum® Plant: EU-001A - EU-001MM Vented to Dowtherm Heater "A" GEU-002 - Styron® Plant: EU-002A - EU-002C Vented to Atmosphere; EU-002D - EU-002E Vented to Styron® Demister GEU-003 - Magnum® Plant: EU-003A Vented to Atmosphere; EU-003B - EU-003C Vented to Magnum® Demister

- **Applicable Requirements**

Table III.B: Applicable Requirements GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(a) In Phase III (compliance phase starting March 12, 2002), the Permittee may elect to comply with one of the alternative quality improvement programs specified in Paragraphs (d) and (e), Condition B.6.4(14), Table III.B of this Title V operating permit. The decision to use one of these alternative provisions to comply with the requirements of Paragraph (c)(1)(ii), Condition B.6.4(7), Table III.B of this Title V operating permit (40 CFR §63.168(d)(1)(ii)) must be made during the first year of Phase III for existing process units and for new process units. (b) A process unit subject to the requirements of Paragraph (d) or (e), Condition B.6.4(14), Table III.B of this Title V operating permit shall comply with those requirements until the process unit has fewer than 2% leaking valves, calculated as a rolling average of 2 consecutive quarters, as specified in Paragraph (d), Condition B.6.4(7), Table III.B of this Title V operating permit (40 CFR §63.168(e)). (c) After the process unit has fewer than 2% leaking valves, the Permittee may elect to comply with the requirements in Condition B.6.4(7), Table III.B (40 CFR §63.168), to continue to comply with the requirements in Paragraph (d) or (e) if appropriate of this Condition B.6.4(14), Table III.B, or comply with both requirements in Conditions B.6.4(7) and B.6.4(14), Table III.B of this Title V operating permit (40 CFR §§63.168 and 63.175). (1) If the Permittee elects to continue the quality improvement program, the Permittee is exempt from the requirements for further progress as specified in Paragraph (d)(4), Condition B.6.4(14), Table III.B, as long as the process unit has fewer than 2 % leaking valves calculated according to Paragraph (d), Condition B.6.4(7), Table III.B of this Title V operating permit (40 CFR §63.168(e)). (2) If the Permittee elects to comply with both Paragraph (e), Condition B.6.4(14), Table III.B and Condition B.6.4(7), Table III.B (40 CFR §63.168), the Permittee may also take advantage of the lower monitoring frequencies associated with lower leak rates in Paragraphs (c)(2), (c)(3), and (c)(4), Condition B.6.4(7), Table III.B of this Title V operating permit (40 CFR §§63.168(d)(2), (d)(3), and (d)(4)). (3) If the Permittee elects not to continue the quality improvement program, the program is no longer an option if the process unit again exceeds 2% leaking valves, and in such case, monthly monitoring will be required. (d) The following requirements shall be met if the Permittee elects to use a quality improvement program to demonstrate further progress: (1) The Permittee shall continue to comply with the requirements in Condition B.6.4(8), Table III.B of this Title V operating permit (40 CFR §63.169) except each valve shall be monitored quarterly. (2) The Permittee shall collect the following data, and maintain records as required in Paragraph "b.viii.(1)", Condition B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.181(h)(1)), for each valve in each process unit subject to the quality improvement program:	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.175 "*Standards: Quality Improvement Program for Valves*"	B.6.4(14)

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(i) The maximum instrument reading observed in each monitoring observation before repair, the response factor for the stream if appropriate, the instrument model number, and date of the observation. (ii) Whether the valve is in gas or light liquid service. (iii) If a leak is detected, the repair methods used and the instrument readings after repair. (3) The Permittee shall continue to collect data on the valves as long as the process unit remains in the quality improvement program. (4) The Permittee must demonstrate progress in reducing the percent leaking valves each quarter the process unit is subject to the requirements of Paragraph (d), Condition B.6.4(14), Table III.B except as provided in Paragraphs (d)(4)(ii) and (d)(4)(iii), Condition B.6.4(14), Table III.B of this Title V operating permit. (i) Demonstration of progress shall mean that for each quarter there is at least a 10% reduction in the percent leaking valves from the percent leaking valves determined for the preceding monitoring period. The percent leaking valves shall be calculated as a rolling average of two consecutive quarters of monitoring data. The percent reduction shall be calculated using the rolling average percent leaking valves, according to the following: $\%LV_R = (\%LV_{AVG1} - \%LV_{AVG2}) / \%LV_{AVG1} \times 100$ Where, $\%LV_R$ = Percent leaking valve reduction. $\%LV_{AVG1} = (\%V_{Li} + \%V_{Li+1}) / 2$ $\%LV_{AVG2} = (\%V_{Li+1} + \%V_{Li+2}) / 2$ $\%V_{Li}$, $\%V_{Li+1}$, $\%V_{Li+2}$ are percent leaking valves calculated for subsequent monitoring periods, i, i + 1 and i + 2. (ii) The Permittee who fails for two consecutive rolling averages to demonstrate at least a 10% reduction per quarter in percent overall average percent reduction based on two or more rolling averages is less than 10% per quarter, shall either comply with the requirements in Paragraph (c)(1)(i), Condition B.6.4(7), Table III.B (40 CFR §63.168(d)(1)(i)) using monthly monitoring or shall comply using a quality improvement program for technology review as specified in Paragraph (e), Condition B.6.4(14), Table III.B, the schedule for performance trials and valve replacements remains as specified in Paragraph (e), Condition B.6.4(14), Table III.B of this Title V operating permit. (iii) As an alternative to the provisions in Paragraph (d)(4)(i), Condition B.6.4(14), Table III.B, the Permittee may use the procedure specified in Paragraphs (d)(4)(iii)(A) and (d)(4)(iii)(B), Condition B.6.4(14), Table III.B of this Title V operating permit to demonstrate progress in reducing the percent leaking valves. (A) The percent leaking reduction that must be achieved each quarter shall be calculated as follows:	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.175 "*Standards: Quality Improvement Program for Valves*"	B.6.4(14) Continued

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	$\%RR = (\%V_L - 2\%) / 0.10$ Where, %RR = percent reduction required each quarter, as calculated according to Paragraph (d), Condition B.6.4(7), Table III.B of this Title V operating permit (40 CFR §63.168(e)). $\%V_L$ = percent leaking valves, calculated according to Paragraph (d), Condition B.6.4(7), Table III.B of this Title V operating permit (40 CFR §63.168(e)). (B) The Permittee shall achieve less than 2% leaking valves no later than 2 years after electing to use the demonstration of progress provisions in Paragraph (d), Condition B.6.4(14), Table III.B of this Title V operating permit (40 CFR §63.175(d)). (e) The following requirements shall be met if the Permittee elects to use a quality improvement program of technology review and improvements: (1) The Permittee shall comply with the requirements in Condition B.6.4(7), Table III.B of this Title V operating permit (40 CFR §63.168) except the requirements for monthly monitoring in Paragraph (c)(1)(i), Condition B.6.4(7), Table III.B of this Title V operating permit (40 CFR §63.168(d)(1)(i)) does not apply. (2) The Permittee shall collect the data specified below, and maintain records as required in Paragraph "b.viii.(2)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.181(h)(2)), for each valve in each process unit subject to the quality improvement program. The data may be collected and the records may be maintained on a process unit or group of process units basis. The data shall include the following: (i) Valve type (e.g. ball, gate, check); valve manufacturer; valve design (e.g. external stem or actuating mechanism, flanged body); materials of construction; packing material; and year installed. (ii) Service characteristics of the stream such as operating pressure, temperature, line diameter, and corrosivity. (iii) Whether the valve is in gas or light liquid service. (iv) The maximum instrument readings observed in each monitoring observation before repair, response factor for the stream if adjusted, instrument model number. (v) If a leak is detected, the repair methods used and the instrument readings after repair. (vi) If the data will be analyzed as part of a larger analysis program involving data from other plants or other types of process units, a description of any maintenance or quality assurance programs used in the process unit that are intended to improve emissions performance. (3) The Permittee shall continue to collect data on the valves as long as the process unit remains in the quality improvement program.	**40 CFR §63.1331** **(Subpart H)** 40 CFR §63.175 "*Standards: Quality Improvement Program for Valves*"	B.6.4(14) Continued

B. GEU-001 - Styron® Plant & Magnum® Plant: EU-001A - EU-001MM Vented to Dowtherm Heater "A" GEU-002 - Styron® Plant: EU-002A - EU-002C Vented to Atmosphere; EU-002D - EU-002E Vented to Styron® Demister GEU-003 - Magnum® Plant: EU-003A Vented to Atmosphere; EU-003B - EU-003C Vented to Magnum® Demister

- **Applicable Requirements**

Table III.B: Applicable Requirements GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(4) The Permittee shall inspect all valves removed from the process unit due to leaks. The inspection shall determine which parts of the valve have failed and shall include recommendations, as appropriate, for design changes or changes in specifications to reduce leak potential. (5) (i) The Permittee shall analyze the data collected to comply with the requirements of Paragraph (e)(2), Condition B.6.4(14), Table III.B of this Title V operating permit to determine the services, operating or maintenance practices, and valve designs or technologies that have poorer than average emission performance and those that have better than average emission performance. The analysis shall determine if specific trouble areas can be identified on the basis of service, operating conditions or maintenance practices, equipment design, or other process specific factors. (ii) The analysis shall also be used to identify any superior performing valve technologies that are applicable to the services, operating conditions, or valve designs associated with poorer than average emission performance. A superior performing valve technology is one for which a group of such valves has a leak frequency of less than 2% for specific applications in such a process unit. A candidate superior performing valve technology is one demonstrated or reported in the available literature or through a group study as having low emission performance and as being capable of achieving less than 2% leaking valves in the process unit.	**40 CFR §63.1331** **(Subpart H)** 40 CFR §63.175 *"Standards: Quality Improvement Program for Valves"*	B.6.4(14) Continued
		(a) In Phase III (compliance phase starting March 12, 2002), if, on a 6-month rolling average, the greater of either 10% of the pumps in a process unit (or plant site) or three pumps in a process unit (or plant site) leak, the Permittee shall comply with the requirements as specified below in Paragraph (a), Condition B.6.4(15), Table III.B of this Title V operating permit (40 CFR 63.176(a)): (1) Pumps that are in polymerizing monomer service shall comply with all requirements except for those specified in Paragraph (d)(8), Condition B.6.4(15), Table III.B of this Title V operating permit (40 CFR §63.176(a)). (2) Pumps that are not in polymerizing monomer service shall comply with all requirements of Condition B.6.4(15), Table III.B of this Title V operating permit (40 CFR §63.176). (b) The Permittee shall comply with the requirements of this section until the number of leaking pumps is less than the greater of either 10% of the pumps or three pumps, calculated as a 6-month rolling average, in the process unit (or plant site). Once the performance level is achieved, the Permittee shall comply with the requirements in Condition B.6.4(2), Table III.B of this Title V operating permit (40 CFR §63.163). (c) If in a subsequent monitoring period, the process unit (or plant site) has greater than 10% of the pumps leaking or three pumps leaking (calculated as a 6-month rolling average), the Permittee shall resume the quality improvement program starting at performance trials.	**40 CFR §63.1331** **(Subpart H)** 40 CFR §63.176 *"Standards: Quality Improvement Program for Pumps"*	B.6.4(15)

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(d) The quality improvement program shall include the following: (1) The Permittee shall comply with the requirements in Condition B.6.4(2), Table III.B of this Title V operating permit (40 CFR §63.163). (2) The Permittee shall collect the following data, and maintain records as required in Paragraph "b.viii.(3)", Conditions B.6.4(1) - B.6.4(15), Section III.B of this Title V operating permit (40 CFR §63.181(h)(3)), for each pump in each process unit (or plant site) subject to the quality improvement program. The data may be collected and the records may be maintained on a process unit or plant site basis and includes the following: (i) Pump type (e.g. piston, horizontal or vertical centrifugal, gear, bellows); pump manufacturer; seal type and manufacturer; pump design (e.g. external shaft, flanged body); materials of construction; if applicable, barrier fluid or packing material, and year installed. (ii) Service characteristics of the stream such as discharge pressure, temperature, flow rate, corrosivity, and annual operating hours. (iii) The maximum instrument readings observed in each monitoring observation before repair, response factor for the stream if appropriate, instrument model number, and date of the observation. (iv) If a leak is detected, the repair methods used and the instrument readings after repair. (v) If the data will be analyzed as part of a larger analysis program involving data from other plants or other types of process units, a description of any maintenance or quality assurance programs used in the process unit that are intended to improve emission performance. (3) The Permittee shall continue to collect data on the pumps as long as the process unit (or plant site) remains in the quality improvement program. (4) The Permittee shall inspect all pumps or pumps seals which exhibited frequent seal failures and were removed from the process unit due to leaks. The inspection shall determine the probable cause of the pump seal failure or of the pump leak and shall include recommendations, as appropriate, for design changes or change in specification to reduce leak potential. (5) (i) The Permittee shall analyze the data collected to comply with the requirements of Paragraph (d)(2), Condition B.6.4(15), Table III.B of this Title V operating permit (40 CFR §63.176) to determine the services, operating or maintenance practices, and pump or pump seal designs or technologies that have poorer than average emissions performance and those that have better than average emissions performance. The analysis shall determine if specific trouble areas can be identified on the basis of service, operating conditions or maintenance practices, equipment design, or other process specific factors. (ii) The analysis shall also be used to determine if there are superior performing pump or pump seal technologies that are applicable to the services, operating conditions, or pump or pump seal designs associated with poorer than average emissions performance. A superior performing pump or pump seal technology is one with a leak frequency of less than 10% for specific applications in the process unit or plant site.	**40 CFR §63.1331** **(Subpart H)** 40 CFR §63.176 "*Standards: Quality Improvement Program for Pumps*"	B.6.4(15) Continued

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	A candidate superior performing pump or pump seal technology is one demonstrated or reported in the available literature or through a group sturdy as having low emissions performance and as being capable of achieving less than 10% leaking pumps in the process unit (or plant site). (iii) The analysis shall include consideration of: (A) The data obtained from the inspections of pumps and pump seals removed from the process unit due to leaks; (B) Information from available literature and from the experience of other plant sites that will identify pump designs or technologies and operating conditions associated with low emissions performances for specific services; and (C) Information on limitations on the service conditions for the pump seal technology operating conditions as well as information on maintenance procedures to ensure continued low emissions performance. (iv) The data analysis may be conducted through an inter- or intra-company program (or through some combination of the two approaches) and may be for a single process unit, a plant site, a company, or a group of process units. (v) The first analysis of the data shall be completed no later than 18 months after the start of the quality improvement program. The first analysis shall be performed using a minimum of 6 months of data. An analysis of the data shall be done each year the process unit is in the quality improvement program. (6) A trial evaluation program shall be conducted at each plant site for which the data analysis does not identify use of superior performing pump seal technology or pumps that can be applied to the areas identified as having poorer than average performance, except as provided in Paragraph (d)(6)(v), Condition B.6.4(15), Table III.B of this Title V operating permit. The trial program shall be used to evaluate the feasibility of using in the process unit (or plant site) the pump designs or seal technologies, and operating and maintenance practices that have been identified by others as having low emission performance.	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.176 "*Standards: Quality Improvement Program for Pumps*"	B.6.4(15) Continued

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(i) The trial program shall include on-line trials of pump seal technologies or pump designs and operating and maintenance practices that have been identified in the available literature or in analysis by others as having the availability to perform with leak rates below 10% in similar services, as having low probability of failure, or as having no external actuating mechanism in contact with the process fluid. If any of the candidate superior performing pump seal technologies or pumps is not included in the performance trials, the reasons for rejecting specific technologies from consideration shall be documented as required in Paragraph "b.viii.(5)(B)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.181(h)(5)(ii)). (ii) The number of pump seal technologies or pumps in the trial evaluation program shall be the lesser of 1% or two pumps for programs involving single process units and the lesser of 1% or five pumps for programs involving a plant site or groups of process units. The minimum number of pumps or pump seal technologies in a trial program shall be one. (iii) The trial evaluation program shall specify and include documentation of: (A) The candidate superior performance pump seal designs or technologies to be evaluated, the stages for evaluating the identified candidate pump designs or pump seal technologies, including the time period necessary to test the applicability; (B) The frequency of monitoring or inspection of the equipment; (C) The range of operating conditions over which the component will be evaluated; and (D) Conclusions regarding the emissions performance and the appropriate operating conditions and services for the trial pump seal technologies or pumps. (iv) The performance trials shall initially be conducted, at least, for a 6-month period beginning not later than 18 months after the start of the quality improvement program. No later than 24 months after the start of the quality improvement program, the Permittee shall have identified pump seal technologies or pump designs that, combined with appropriate process, operating, and maintenance practices, operate with low emissions performance for specific applications in the process unit. The Permittee shall continue to conduct performance trials as long as no superior performing design or technology has been identified, except as provided in Paragraph (d)(6)(vi), Condition B.6.4(15), Table III.B of this Title V operating permit. The initial list of superior emissions performance pump designs or pump seal technologies shall be amended in the future, as appropriate, as additional information and experience is obtained. (v) Any plant site with fewer than 400 valves and owned by a corporation with fewer than 100 employees shall be exempt from trial evaluations of pump seals or pump designs. Plant sites exempt from the trial evaluations of pumps shall begin the pump seal or pump replacement program at the start of the fourth year of the quality improvement program. (vi) The Permittee who has conducted performance trials on all alternative superior emissions performance technologies suitable for the required applications in the process unit may stop conducting performance	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.176 "*Standards: Quality Improvement Program for Pumps*"	B.6.4(15) Continued

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	trials provided that a superior performance design or technology has been demonstrated or there are no technically feasible alternative superior technologies remaining. The permittee shall prepare an engineering evaluation documenting the physical, chemical, or engineering basis for the judgement that the superior emissions performance technology is technically infeasible or demonstrating that it would not reduce emissions. (7) The Permittee shall prepare and implement a pump quality assurance program that details purchasing specifications and maintenance procedures for all pumps and pump seals in the process unit. The quality assurance program may establish any number of categories, or classes, of pumps as needed to distinguish among operating conditions and services associated with poorer than average emissions performance as well as those associated with better than average emissions performance. The quality assurance program shall be developed considering the findings of the data analysis required under Paragraph (d)(5), Condition B.6.4(15), Table III.B, if applicable, the findings of the trial evaluation required in Paragraph (d)(6), Condition B.6.4(15), Table III.B of this Title V operating permit, and the operating conditions in the process unit. The quality assurance program shall be updated each year as long as the process unit has the greater of either 10% or more leaking pumps or has three leaking pumps. (i) The quality assurance program shall: (A) Establish minimum design standards for each category of pumps or pump seal technology. The design standards shall specify known critical parameters such as tolerance, manufacturer, materials of construction, previous usage, or other applicable identified critical parameters; (B) Require that all equipment orders specify the design standard (or minimum tolerances) for the pump or the pump seal; (C) Provide for an audit procedure for quality control of purchased equipment to ensure conformance with purchase specifications. The audit program may be conducted by the Permittee or by a designated representative; and (D) Detail off-line pump maintenance and repair procedures. These procedures shall include provisions to ensure that rebuilt or refurbished pumps and pump seals will meet the design specifications for the pump category and will operate such that emissions are minimized. (ii) The quality assurance program shall be established no later than the start of the third year of the quality improvement program for plant sites with 400 or more valves or 100 or more employees; and no later than the start of the fourth year of the quality improvement program for plant sites with less than 400 valves and 100 employees.	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.176 "*Standards: Quality Improvement Program for Pumps*"	B.6.4(15) Continued

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **APPLICABLE REQUIREMENTS**

TABLE III.B: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	Styron® Plant and Magnum® Plant	(8) Beginning at the start of the third year of the quality improvement program for sites with 400 or more valves or 100 or more employees and at the start of the fourth year of the quality improvement program for plant sites with less than 400 valves and less than 100 employees, the Permittee shall replace as describe in Paragraphs (d)(8)(i) and (d)(8)(ii), Condition B.6.4(15), Table III.B of this Title V operating permit, the pumps or pump seals that are not superior emissions performance technology with pumps or pump seals that have been identified as superior emissions performance technology and that comply with the quality assurance standards for the pump category. Superior emissions performance technology is that category or design of pumps or pump seals with emissions performance which, when combined with appropriate process, operating, and maintenance practices, will result in less than 10% leaking pumps for specific applications in the process unit or plant site. Superior emissions performance technology includes material or design changes to the existing pump, pump seal, seal support system, installation of multiple mechanical seals or equivalent, or pump replacement. (i) Pumps or pump seals shall be replaced at the rate of 20% per year based on the total number of pumps in light liquid service. The minimum number of pumps or pump seals shall be one. Pump replacement shall continue until all pumps subject to the requirements of Condition B.6.4(2), Table III.B of this Title V operating permit (40 CFR §63.163) are pumps determine to be superior performance technology. (ii) The Permittee may delay replacement of pump seals or pumps with superior technology until the next planned process unit shutdown, provided the number of pumps and pump seals replaced is equivalent to the 20% or greater annual replacement rate. (iii) The pumps shall be maintained as specified in the quality assurance program.	**40 CFR §63.1331** (**Subpart H**) 40 CFR §63.176 "*Standards: Quality Improvement Program for Pumps*"	B.6.4(15) Continued

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.1. VOC: Emissions of VOC shall not exceed those limits stated in Condition B.1, Table III.B of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

B.1.a. Monitoring and Testing Requirements

i. The Permittee shall determine compliance with the emissions limitations set forth in Condition B.1, Table III.B of this Title V operating permit by use of: surface condensers; or a system demonstrated to have a control efficiency equivalent to or greater than the surface condensers, and approved by the Commissioner [RCSA §22a-174-20(y)(3)].

ii. The Permittee shall calculate breathing and filling losses using AP-42 Chapter 7.1 "*Organic Liquid Storage Tanks*" for fixed roof tanks [RCSA §22a-174-33(j)(1)(K)].

iii. If required by the Commissioner, emissions shall be measured using the average of three one-hour stack tests [RCSA§22a-174-5(b)(5)].

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.1.b. Record Keeping Requirements

i. The Permittee shall monitor the operating parameters of the air pollution control equipment: Dowtherm Heater "A" for GEU-001. The Commissioner may allow periodic monitoring if continuous monitoring is technologically or economically infeasible. The Commissioner may require additional monitoring as needed [RCSA §22a-174-20(y)(7)].

ii. The Permittee shall maintain records of the dates, times, and places of all emissions testing, emissions calculations, the persons performing the measurements, the test methods used, the operating conditions at time of testing, and the results of such testing when required [RCSA §22a-174-4(c)(1)].

B.1.c. Reporting Requirements

The Permittee shall submit a written report to the Commissioner of the results of emissions testing, conducted for compliance purposes, within 30 days of the completion of such emissions tests [RCSA §22a-174-4(c)(1)].

B.2. VOC Leaks (Fugitive Losses): Fugitive losses of VOC via equipment leaks shall not exceed those limitations and restrictions stated in Condition B.2, Table III.B of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

B.2.a. Monitoring and Testing Requirements

i. The Permittee shall determine evidence of leakage through the use of the following test methods set forth in Paragraphs "a.(1)" and "a.(2)" Condition B.2, Compliance Demonstration, Section III.B of this Title V operating permit, below and in RCSA §22a-174-20(x)(8) [RCSA §22a-174-20(x)(7)]:

(1) The Permittee shall either use a soap solution to detect gaseous VOC leaks at all points of potential leakage where this test method is determined to be valid by the Commissioner or his representative and where any bubble formation during a three-minute observation period is deemed evidence of leakage [RCSA §22a-174-20(x)(8)(A)]; or

(2) A hydrocarbon detector test to detect gaseous VOC and light liquid leaks where any measured concentration in excess of 10,000 ppm is deemed to be evidence of leakage [RCSA §22a-174-20(x)(8)(B)].

ii. The Permittee shall visually inspect every pump in light liquid service each week. If indications of liquid leakage are found, the pump shall be repaired within 15 days after detection [RCSA §22a-174-20(x)(4)].

iii. The Permittee shall monitor each pump, valve, compressor, and safety/relief valve in gas/vapor service or in light liquid service for gaseous leaks at least once each calendar quarter. The Permittee shall notify the Commissioner of such monitoring at least ten days prior to the scheduled monitoring. If there is evidence of leakage, the Permittee shall repair the component within 15 days of detection. The monitoring procedure shall be in accordance with US EPA Method 21 [RCSA §22a-174-20(x)(5)(A)].

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.2.a. Monitoring and Testing Requirements, Continued

iv. The Permittee shall monitor safety/relief valves after each over-pressure relief to ensure the valve has been properly reseated so that a concentration of VOC is less than 1000 ppm. The monitoring procedure shall be in accordance with US EPA Method 21 [RCSA §22a-174-20(x)(5)(B)].

v. Exemption from Quarterly Testing: If after four (4) consecutive quarters of monitoring less than two percent of the valves in gas/vapor or light liquid service show evidence of leakage than the Permittee may monitor the valves for gaseous leaks only once a year during the third or fourth quarter. If the number of valves showing evidence of leakage remains at two percent or less, then these valves need only be monitored once a year during the third or fourth quarter. However, if more than two percent of these valves show evidence of leakage, they shall be monitored every quarter until four consecutive quarter are monitored which have no more than two percent of these valves showing evidence of leakage [RCSA §22a-174-20(x)(9)].

vi. Exemptions From Monitoring:

(1) When a fugitive emissions source is unsafe to monitor because of extreme temperatures, pressure, or because it is more than 12 feet above a permanent support surface, or other reasons, the Permittee may request a waiver from quarterly testing from the Commissioner who may allow monitoring less frequently than each quarter provided the source is monitored once a year [RCSA §22a-174-20(x)(13)(B)].

(2) No monitoring shall be required under conditions where no leakage can occur such as fugitive emissions sources under vacuum. If such tests are run, leak free conditions will not be counted toward reductions in testing frequency [RCSA §22a-174-20(x)(13)(C)].

(3) Safety relief valves that are isolated from the process by a frangible disc or rupture disc are exempted from the quarterly monitoring requirements provided they are monitored on an annual basis [RCSA §22a-174-20(x)(13)(D)].

(4) Canned pump which have demonstrated compliance with 40 CFR §60.482-2(e)(2) may be exempted from Paragraph "a.iii", Condition B.2, Compliance Demonstration, Section III.B of this Title V operating permit provided they meet the requirements of 40 CFR §60.482-2(e)(3) [RCSA §22a-174-20(x)(13)(E)].

(5) Canned pump which have demonstrated compliance with 40 CFR §60.482-2(e)(2) are exempted from Paragraph "a.ii", Condition B.2, Compliance Demonstration, Section III.B of this Title V operating permit provided they meet the requirements of 40 CFR §60.482-2(e)(3) [RCSA §22a-174-20(x)(13)(F)].

B.2.b. Record Keeping Requirements

i. The Permittee shall keep records which shall be available to the Commissioner upon request and shall include [RCSA §22a-174-20(x)(11)]:

(1) Identification of the source being inspected or monitored;

(2) Dates of inspection or monitoring;

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.2.b. Record Keeping Requirements, Continued

(3) Result of inspection or monitoring;
(4) The type of action taken if a leak was detected;
(5) The type of repair made and date of repair;
(6) If the repair was delayed, an explanation as to why; and
(7) Test method used.

ii. The Permittee is not required to maintain records of pump monitoring and inspection unless pumps are found to be leaking [RCSA §22a-174-20(x)(4)].

B.2.c. Corrective Action and Re-Test Requirements

Upon any evidence of leakage as described above, the Permittee shall treat such leakage as a malfunction of control equipment or methods as described in RCSA §22a-174-7(c). The requirements set forth in RCSA §22a-174-7(c) are set forth in Paragraph (m), Table III.Q of this Title V operating permit. A retest in accordance with RCSA §22a-174-20(x)(8) shall be performed immediately after all required repairs are completed [RCSA §22a-174-20(x)(12)].

B.3. VOC Storage: VOC stationary storage vessels shall not exceed those limitations and restrictions stated in Condition B.3, Table III.B of this Title V operating permit. Demonstration of compliance shall be based on the following requirements:

B.3.a. Monitoring and Testing Requirements

Monitoring and testing shall not be required because the Permittee cannot violate the applicable requirement unless the tank is physically altered. All storage tanks are pressurized and connected to a vapor loss control device.

B.4. TSP/PM_{10}: Particulate Matter emissions shall be prevented as specified in Condition B.4, Table III.B of this Title V operating permit. Demonstration of compliance shall be based on the following requirements:

B.4.a. Monitoring and Testing Requirements

The Permittee shall monitor boxes of particulate matter fines and ensure steps are taken to prevent fines from becoming airborne. Boxes shall be covered during transport between buildings [RCSA §22a-174-18(b)].

B.5. State HAP: Emissions of HAP shall not exceed those limits stated in Condition B.5, Table III.B of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.5.a. Monitoring and Testing Requirements

i. Should the production rate for Acrylonitrile-Butadiene-Styrene be increased, or should new raw materials be introduced into the manufacturing process, or should an exceedance be determined or detected over the allowable VOC limitations set forth in Condition B.1, then the Permittee shall analyze such production increase, change, or VOC non-compliance prior to making such change to ensure that the ASC shall not exceed its respective MASC. The MASC of any HAP listed in Table 29-1, RCSA §22a-174-29, shall be determined using Equation No. 3 below [RCSA §§22a-174-29(b) & 22a-174-29(c)]:

$$\frac{0.885 \times HLV \times (X + 1.08V^{0.64})^{1.56}}{V} \qquad (3)$$

Where,
HLV = applicable hazard limiting value in $\mu g/m^3$ for 8-hour and 30-minute averaging periods
V = average flow rate in m^3/sec
X = the closest distance, in meters, from the discharge point to the nearest property line in meters

ii. For each air pollution control equipment, the Permittee shall monitor operating parameters and maintain operation in accordance with applicable manufacturer instructions. The Permittee shall not operate the Styron® or Magnum® Plants without operating air pollution control equipment [RCSA §§22a-174-29(b) & 22a-174-7(a)].

iii. No person shall deliberately shutdown any air pollution control equipment while the Styron® or Magnum® Plants are in operation except for such necessary maintenance as cannot be accomplished when the Plants are not in operation and are not emitting air pollutants [RCSA §22a-174-7(b)].

iv. The Permittee may be required to conduct testing to determine concentration of HAPs should the Commissioner determine that operation of the Styron® or Magnum® Plant might reasonably be expected to cause an exceedance of an applicable Hazard Limiting Value (HLV) or Ambient Air Quality Standard [RCSA §22a-174-29(e)(1)].

B.5.b. Record Keeping Requirements

i. The Permittee shall maintain records of MASC and actual stack concentration calculations verifying compliance with RCSA §22a-174-29 [RCSA §22a-174-29(c) & 40 CFR §70.6(a)(3) & RCSA §22a-174-33(j)(1)(K)].

ii. The Permittee shall maintain records certifying that all air pollution control equipment within the Styron® and Magnum® Plants are operated and maintained in accordance with applicable manufacturer instructions and applicable New Source Review permits [RCSA §§22a-174-29(c) & 22a-174-7(a)].

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.5.c. **Reporting Requirements**

i. The Permittee shall report any exceedance of the MASC to the Commissioner [RCSA §22a-174-29(f)].

ii. The Permittee shall, upon written notice by the Commissioner, supply the Commissioner with information, for those time periods specified, concerning the usage of any substances listed in RCSA §22a-174-29, Table 29-1 [RCSA §22a-174-29(f)].

B.6. Federal HAP: [B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15)] Emissions of HAP shall not exceed those limits stated in Condition B.6 (B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15)) Table III.B of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

B.6.1. Definitions

a. **Record Keeping Requirements**

The Permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept as long as the storage vessel retains Group 1 or Group 2 status and is in operation. For each Group 2 storage vessel the Permittee is not required to comply with any other provisions of Conditions B.6.1, B.6.2(1) - B.6.2(3), Table III.B of this Title V operating permit (40 CFR §§63.119 through 63.123, of Subpart G) [40 CFR §63.123(a)].

B.6.2(1) - B.6.2(3). Storage Vessel Requirements

a. **Reporting Requirements**

i. For each Group 1 storage vessel, the Permittee shall comply with the requirements of Paragraphs "a.i.(1)" through "a.i.(3)", Conditions B.6.2(1) - B.6.2(3), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.122(a)].

(1) The Permittee shall submit a Notification of Compliance Status as required by 40 CFR §63.152(b) of Subpart G (but in accordance with 40 CFR §63.1335(e)(5)) and shall submit as part of the Notification of Compliance Status the information specified in Paragraph "iii" of this section.

(2) The Permittee shall submit Periodic Reports as required by 40 CFR §63.152(c) of Subpart G and shall submit as part of the Periodic Reports the information specified in Paragraphs "a.iv" below.

(3) The Permittee shall submit, as applicable, other reports as required by 40 CFR §63.152(d) of Subpart G, containing the information specified in Paragraph "a.viii" of this Conditions B.6.2(1) - B.6.2(3), Compliance Demonstration, Section III.B of this Title V operating permit.

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B.6.2(1) - B.6.2(3). Storage Vessel Requirements

a. Reporting Requirements, Continued

ii. If the Permittee elects to comply with Paragraph (a), Condition B.6.2(2), Table III.B of this Title V operating permit (40 CFR §63.119(e)) by using a closed vent system and a control device other than a flare shall submit, as part of the Monitoring Plan, the information specified in Paragraph (a)(2)(i), Condition B.6.2(3), Table III.B of this Title V operating permit (40 CFR §63.120(d)(2)(i)) and the information specified in either Paragraph (a)(2)(ii), Condition B.6.2(3) (40 CFR §63.120(d)(2)(ii)) or Paragraph (a)(2)(iii), Condition B.6.2(3), (40 CFR §63.120(d)(2)(iii) of Subpart G) Table III.B of this Title V operating permit [40 CFR §63.122(b)].

iii. If the Permittee elects to comply with Paragraph (a), Condition B.6.2(2), Table III.B of this Title V operating permit [40 CFR §63.119(e)] using a closed vent system and a control device shall submit, as part of the Notification of Compliance Status required by 40 CFR §63.152(b) of Subpart G, the information specified in either Paragraph "a.iii.(1)" or "a.iii.(2)" below, Conditions B.6.2(1) - B.6.2(3), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.122(c)].

(1) If a control device other than a flare is used, the Permittee shall submit the information specified in Paragraph (a)(3)(i) and if applicable Paragraph (a)(3)(ii), Condition B.6.2(3), Table III.B of this Title V operating permit (40 CFR §63.120(d)(3)(i) and, if applicable, (d)(3)(ii)).

iv. If the Permittee elects to comply with Condition B.6.2(2), Table III.B of this Title V operating permit (40 CFR §63.119(e)) by installing a closed vent system and control device shall submit, as part of the next Periodic Report required by 40 CFR §63.152(c) of Subpart G, the information specified in Paragraphs "a.iv.(1)" through "a.iv.(2)" below, Conditions B.6.2(1) - B.6.2(3), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.122(g)].

(1) As required by Paragraph (a)(4), Condition B.6.2(3), Table III.B of this Title V operating permit (40 CFR §63.120(d)(4)), the Periodic Report shall include the information specified in Paragraphs "a.iv.(1)(A)" and "a. iv.(1)(B)" below, Conditions B.6.2(1) -

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.2(1) - B.6.2(3). Storage Vessel Requirements

a. Reporting Requirements, Continued

B.6.2(3), Compliance Demonstration, Section III.B of this Title V operating permit for those planned routine maintenance operations that would require the control device not to meet the requirements of Paragraph (a)(1) or (a)(2), Condition B.6.2(2), Table III.B of this Title V operating permit (40 CFR §63.119(e)(1) or (e)(2)), as applicable.

(A) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

(B) A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of Paragraphs (a)(1) or (a)(2), Condition B.6.2(2), Table III.B of this Title V operating permit (40 CFR §63.119 (e)(1) or (e)(2)], as applicable, due to planned routine maintenance.

(2) If a control device other than a flare is used, the Periodic Report shall describe each occurrence when the monitored parameters were outside of the parameter ranges documented in the Notification of Compliance Status in accordance with Paragraph (a), Condition B.6.2(3), Table III.B of this Title V operating permit (40 CFR §63.120(d)(3)(i)). The description shall include the information specified in Paragraphs "a.iv.(2)(A)" and "a.iv.(1)(B)" below, Conditions B.6.2(1) - B.6.2(3), Compliance Demonstration, Section III.B of this Title V operating permit.

(A) Identification of the control device for which the measured parameters were outside of the established ranges, and

(B) Cause for the measured parameters to be outside of the established ranges.

b. Record Keeping Requirements

i. The Permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 or Group 2 status and is in operation. For each Group 2 storage vessel, the Permittee is not required to comply with any other provisions of Conditions B.6.2(1) - B.6.2(3), Table III.B of this Title V operating permit (40 CFR §§63.119 through 63.123) other than those required by this paragraph [40 CFR §63.119(a)].

ii. If the Permittee elects to comply with Condition B.6.2(2), Table III.B of this Title V operating permit [40 CFR §63.119(e)] then the Permittee shall keep in a readily accessible location the records specified in Paragraphs "b.ii.(1)" and "b.ii.(2)" below [40 CFR §63.119(c)].

(1) A record of the measured values of the parameters monitored in accordance with Paragraph (a)(5), Condition B.6.2(3), Table III.B of this Title V operating permit (40 CFR §63.120(d)(5)).

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.2(1) - B.6.2(3). Storage Vessel Requirements

b. Record Keeping Requirements, Continued

(2) A record of the planned routine maintenance performed on the control device including the duration of each time the control device does not meet the specifications of Paragraph (a)(1) or (a)(2), Condition B.6.2(2), Table III.B of this Title V operating permit (40 CFR §63.119 (e)(1) or (e)(2)), as applicable, due to the planned routine maintenance. Such a record shall include the information specified in Paragraphs "b.ii.(2)(A)" and "b.ii.(2)(B)" below.

(A) The first time of day and date the requirements of Paragraph (a)(1) or (a)(2), Condition B.6.2(2), Table III.B of this Title V operating permit (40 CFR §63.119 (e)(1) or (e)(2)), as applicable, were not met at the beginning of the planned routine maintenance, and

(B) The first time of day and date the requirements of Paragraph (a)(1) or (a)(2), Condition B.6.2(2), Table III.B of this Title V operating permit (40 CFR §63.119 (e)(1) or (e)(2)), as applicable, were met at the conclusion of the planned routine maintenance.

B.6.3. Batch Process Vents

a. Record Keeping Requirements

The Permittee shall keep the following records readily accessible and up-to-date [40 CFR §63.1326(d)]:

i. Records designating the established batch cycle limitation required by Condition B.6.3, Table III.B of this Title V operating permit (40 CFR §63.122(g)(1)) and specified as follows (in 40 CFR §63.1325(g)): The Permittee shall determine the batch cycle limitation such that annual emissions for the batch process vent remain less than 11,800 Kg/year [40 CFR §63.1325(g)(1)]; and records

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- **COMPLIANCE DEMONSTRATION**

B.6.3. Batch Process Vents

a. Record Keeping Requirements, Continued

specifying the number and type of batch cycles accomplished for each three-month period.

(1) If the expected mix of products serves as the basis for the batch cycle limitation, the batch cycle limitation shall be determined such that any foreseeable combination of products which the Permittee desires the flexibility to manufacture shall be allowed. Combinations of products not accounted for in the documentation required by Paragraph "a.ii.(4)", Condition B.6.3, Compliance Demonstration, Section III.B of this Title V operating permit shall not be allowed within the restrictions of the batch cycle limitation.

(2) If, for a batch process vent with more than one product, a single worst-case HAP emitting product serves as the basis for the batch cycle limitation, the batch cycle limitation shall be determined such that the maximum number of batch cycles the Permittee desires the flexibility to accomplish, using the worst-case HAP emitting product and ensuring that the batch process vent or that emissions remain less than 11,800 Kg/year shall be allowed. This value shall be the total number of batch cycles allowed within the restrictions of the batch cycle limitation regardless of which products are manufactured.

ii. Documentation supporting the establishment of the batch cycle limitation shall include the information specified below, as appropriate [40 CFR §63.1325(g)(2)]:

(1) Identification that the purpose of the batch cycle limitation is to comply with the limitation set forth in Condition B.6.3, Table III.B of this Title V operating permit [40 §CFR 63.1325(g)(2)(i)].

(2) Identification that the batch cycle limitation is based on a single worst-case HAP emitting product or on the expected mix or products for said batch process vent [40 CFR §63.1325(g)(2)(ii)].

(3) Definition of operating year for the purposes of determining compliance with the batch cycle limitation [40 CFR §63.1325(g)(2)(iii)].

(4) If the batch cycle limitation is based on a single worst-case HAP emitting product, documentation specified in 40 CFR §§63.1323(a)(1)(ii) - (iv) as appropriate, describing how the single product meets the requirements for worst-case HAP emitting product and the number of batch cycles allowed under the batch cycle limitation [40 CFR §63.1325(g)(2)(iv)].

(5) If the batch cycle limitation is based on the expected mix of products, the Permittee shall provide documentation that describes as many scenarios for differing mixes of products (i.e. how many batch cycles for each product) that the Permittee desires the flexibility to accomplish. Alternatively, the Permittee shall provide a description of the relationship among the mix of products that will allow a determination of compliance with the batch cycle limitation under an infinite number of scenarios. For example, if a batch process vent has two products, each product has the same flow rate and emits for the same amount of time, and product No. 1 has twice the emissions as product No. 2, the relationship describing an infinite number of scenarios would be that the Permittee can accomplish two batch cycles of product No. 2 for each batch cycle of product No. 1 within the restriction of the batch cycle limitation [40 CFR §63.1325(g)(2)(v)].

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GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.3. Batch Process Vents

b. Reporting Requirements

The Permittee of a batch process vent shall submit the following information to the Administrator and the Commissioner [40 CFR §63.1327(a)]: The information specified in "Record Keeping Requirements", Paragraphs "a.i" and "a.ii", Condition B.6.3, Compliance Demonstration, Section III.B of this Title V operating permit.

B.6.4(1) - B.6.4(15). Equipment Leaks

a. Monitoring and Testing Requirements

i. The Permittee shall conduct monitoring, as required in Conditions B.6.4(1) - B.6.5(15), Table III.B, of this Title V operating permit, in compliance with the following requirements [40 CFR §63.180(b)]:

(1) Monitoring shall comply with Method 21 of 40 CFR Part 60 Appendix A.

(2) (A) Except as provided for in Paragraph "a.i.(2)(B)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, the detection instrument shall meet the performance criteria of Method 21 of 40 CFR Part 60, Appendix A, except the instrument response factor criteria in §3.1.2(a) of Method 21 shall be for the average composition of the process fluid not each individual VOC in the stream. For process streams that contain nitrogen, water, air, or other inerts which are not organic HAP or VOC, the average stream response factor may be calculated on an inert-free basis. The response factor may be determined at any concentration for which monitoring leaks will be conducted.

(B) If no instrument is available at the plant site that will meet the performance criteria specified in Paragraph "a.i.(2)(A)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, the instrument readings may be adjusted by multiplying by the average response factor of the process fluid, calculated on an inert-free basis as described in Paragraph "a.i.(2)(A)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR Part 60, Appendix A.

(4) Calibration gases shall be:

(A) Zero air (#ppm of hydrocarbon in air); and
Mixtures of methane in air at the concentrations specified in Paragraphs "a.i.(4)(A)" through "a.i.(4)(C)" below, Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in Paragraph "a.i.(2)(A)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

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B.6.4(1) - B.6.4(15). Equipment Leaks

a. Monitoring and Testing Requirements, Continued

(i) For Phase I, a mixture of methane or other compounds, as applicable, in air at a concentration of approximately, but less than, 10,000 ppm.

(ii) For Phase II, a mixture of methane or other compounds, as applicable, and air at a concentration of approximately, but less than, 10,000 ppm for agitators, 5,000 ppm for pumps, and 500 ppm for all other equipment, except as provided in Paragraph "a.i.(4)(C)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(iii) For Phase III (compliance phase starting March 12, 2002), a mixture of methane or other compounds, as applicable, and air at a concentration of approximately, but less than, 10,000 ppm methane for agitators; 5,000 ppm for pumps in polymerizing monomer service; 1,000 ppm for all other pumps; and 500 ppm for all other equipment except as provided in Paragraph "a.i.(4)(C)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(B) The instrument may be calibrated at a higher methane concentration than the concentration specified for that piece of equipment. The concentration of the calibration gas may exceed the concentration specified as a leak by no more than 2,000 ppm. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 ppm above the concentration specified as a leak and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 ppm. If only one scale on an instrument will be used during monitoring, the Permittee need not calibrate the scales that will not be used during that day's monitoring.

(5) Monitoring shall be performed when the equipment is in organic HAP service, in use with an acceptable surrogate volatile organic compound which is not an organic HAP, or is in use with any other detectable gas or vapor.

(6) Monitoring data that do not meet the criteria specified in Paragraphs "a.i.(1)" through "a.i.(5)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit may be used to qualify for less frequent monitoring under the provision in 40 CFR §§63.168(d)(2)and (d)(3) or §§68.174(b)(3)(ii) or (b)(3)(iii), Conditions B.6.4(1) - (15) of this Title V operating permit provided the data meet the conditions specified in Paragraphs "a.i.(6)(A)" and "a.i.(6)(B)" below, Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit:

(A) The data was obtained before April 22, 1994.

(B) The departures from the criteria specified in Paragraphs "a.i.(1)" through "a.i.(5)" above, Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit from the specified monitoring frequency of Paragraph (c), Condition B.6.4(7), Table III.B of this Title V operating permit (40 CFR §63.168(c)) are minor and do not significantly affect the quality of the data. Examples of minor departures are monitoring at every six weeks instead of monthly or quarterly, following the performance criteria of §3.1.2(a) of Method 21 of Appendix A of 40 CFR Part 60 instead of Paragraph "a.i.(2)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, or monitoring at a different leak definition if the data would indicate the presence or absence of a leak at the concentration specified in Conditions B.6.4(1) - B.6.4(15), Table III.B of this Title V operating

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.4(1) - B.6.4(15). Equipment Leaks

a. Monitoring and Testing Requirements, Continued

permit (Subpart H). Failure to use a calibrated instrument is not considered a minor departure.

ii. When equipment is monitored for compliance as required in Paragraph (i), Condition B.6.4(3); Paragraph (a), Condition B.6.4(4); and Paragraph (e), Condition B.6.4(11), Table III.B of this Title V operating permit (40 CFR §§63.164(i), 63.165(a), and 63.172(f)) or when equipment subject to a leak definition of 500 ppm is monitored for leaks as required by this Title V operating permit, the Permittee may elect to adjust or not to adjust the instrument readings for background. If the Permittee elects to not adjust instrument readings for background, the Permittee shall monitor the equipment according to the procedures specified in Paragraphs "a.i.(1)" through "a.i.(4)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. In such case, all instrument readings shall be compared directly to the applicable leak definition to determine whether there is a leak. If the Permittee elects to not adjust instrument readings for background, the Permittee shall monitor the equipment according to the procedures specified in Paragraphs "a.ii.(1)" through "a.ii.(4)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. In such case, all instrument readings shall be compared directly to the applicable leak definition to determine whether there is a leak. If the Permittee elects to adjust instrument readings for background, the Permittee shall monitor the equipment according to the procedures specified in Paragraphs "a.ii.(1)" through "a.ii.(4)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.180(c)]:

(1) The requirements of Paragraphs "a.ii.(1)" through "a.ii.(4)" below, Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit shall apply.

(2) The background level shall be determined, using the same procedures that will be used to determine whether the equipment is leaking.

(3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 of 40 CFR Part 60, Appendix A.

(4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

iii. (1) Each piece of equipment within a process unit that can reasonably be expected to contain equipment in organic HAP service is presumed to be in organic HAP service unless the Permittee demonstrates that the piece of equipment is not in organic HAP service. For a piece of equipment to be considered not in organic HAP service, it must be determined that the percent organic HAP content can be reasonably expected not to exceed 5% by weight on an annual average basis. For purposes of determining the % organic HAP content of the process fluid that is contained in or contacts equipment, Method 18 of 40 CFR Part 60, Appendix A shall be used (40 CFR §63.180(d)). Alternatively, Method 25A of 40 CFR Part 60, Appendix A may be used (40 CFR §63.1331(a)(8)). The organic HAP used as the calibration gas for Method 25A, 40 CFR Part 60, Appendix A, shall be the single organic HAP representing the

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- **COMPLIANCE DEMONSTRATION**

B.6.4(1) - B.6.4(15). Equipment Leaks

a. Monitoring and Testing Requirements, Continued

largest % by volume of the emissions. The use of Method 25A, 40 CFR Part 60, Appendix A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale [40 CFR §63.1331(a)(8)].

(2) (A) The Permittee may use good engineering judgment rather than the procedures in Paragraph "a.iii.(1)", Condition B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit to determine that the percent organic HAP content does not exceed 5% by weight. When the Permittee and the Administrator do not agree on whether a piece of equipment is not in organic HAP service, however, the procedures in Paragraph "a.iii.(1)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit shall be used to resolve the disagreement.

(B) Conversely, the Permittee may determine that the organic HAP content of the process fluid does not exceed 5% by weight by, for example, accounting for 98% of the content and showing that organic HAP is less than 3%.

(3) If the Permittee determines that a piece of equipment is in organic HAP service, the determination can be revised after following the procedures in Paragraph "a.iii.(1)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, or by documenting that a change in the process or raw materials no longer causes the equipment to be in organic HAP service.

(4) Samples used in determining the % organic HAP content shall be representative of the process fluid that is contained in or contacts the equipment.

b. Record Keeping Requirements

i. The Permittee may comply with the record keeping requirements for these process units in one record keeping system if the system identifies each record by process unit and the program being implemented (e.g., quarterly monitoring, quality improvement) for each type of equipment. All records and information required by this section shall be maintained in a manner that can be readily accessed at the plant site. This could include physically locating the records at the plant site or accessing the records from a central location by computer at the plant site [40 CFR §63.181(a)].

ii. Except as provided in Paragraph "b.v", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, the following information pertaining to all equipment in each process unit subject to the requirements in Condition B.6.4(1) - B.6.4(13), Table III.B of this Title V operating permit (40 CFR §§63.162 through 63.174) shall be recorded [40 CFR §63.181(b)]:

(1) (A) A list of identification numbers for equipment except connectors exempt from monitoring and record keeping identified in Condition B.6.4(13), Table III.B of this Title V operating permit (40 CFR §63.174 and instrumentation systems) subject to the

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

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B.6.4(1) - B.6.4(15). Equipment Leaks

b. Record Keeping Requirements, Continued

requirements of Conditions B.6.4(1) - B.6.4(15), Table III.B of this Title V operating permit (Subpart H). Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of Conditions B.6.4(1) - B.6.4(15), Table III.B of this Title V operating permit (Subpart H) are identified as a group, and the number of connectors subject is indicated. With respect to connectors, the list shall be complete no later than the completion of the initial survey required by Paragraph (b)(1) or (b)(2), Condition B.6.4(13), Table III.B (40 CFR §63.174(b)(1) or (b)(2)) of this Title V operating permit.

(B) A schedule by process unit for monitoring connectors subject to the provisions of Paragraph (a), Condition B.6.4(13), Table III.B (40 CFR §63.174(a)) and valves subject to the provisions of Paragraph (c), Condition B.6.4(7), Table III.B of this Title V operating permit (40 CFR§63.168(d)).

(C) Physical tagging of the equipment to indicate that it is in organic HAP service is not required. Equipment may be identified on a plant site plan, in log entries, or by other appropriate methods.

(2) (A) A list of identification numbers for equipment that the Permittee elects to equip with a closed-vent system and control device, under the provisions of Paragraph (g), Condition B.6.4(2); Paragraph (h), Condition B.6.4(3); Paragraph (c), Condition B.6.4(4); or Paragraph (f), Condition B.6.4(12), Table III.B of this Title V operating permit (40 CFR §63.163(g), §63.164(h), §63.165(c), or §63.173(f)).

(B) A list of identification numbers for compressors that the Permittee elects to designate as operating with an instrument reading of less than 500 parts per million above background, under the provisions of Paragraph (i), Condition B.6.4(3), Table III.B of this Title V operating permit (40 CFR §63.164(i)).

(3) (A) A list of identification numbers for pressure relief devices subject to the provisions in Paragraph (a), Condition B.6.4(4), Table III.B of this Title V operating permit (40 CFR §63.165(a)).

(B) A list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions of Paragraph (d), Condition B.6.4(4), Table III.B of this Title V operating permit (40 CFR §63.165(d)).

(4) Identification of instrumentation systems subject to the provisions of Conditions B.6.4(1) - B.6.4(15), Table III.B of this Title V operating permit (Subpart H). Individual components in an instrumentation system need not be identified.

(5) Identification of screwed connectors subject to the requirements of Paragraph (c)(2), Condition B.6.4(13), Table III.B of this Title V operating permit (40 CFR §63.174(c)(2)). Identification can be by area or grouping as long as the total number within each group or area is recorded.

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- **COMPLIANCE DEMONSTRATION**

B.6.4(1) - B.6.4(15). Equipment Leaks

b. Record Keeping Requirements, Continued

(6) The following information shall be recorded for each dual mechanical seal system:
  (A) Design criteria required in Paragraph (e)(8), Condition B.6.4(2); Paragraph (e), Condition B.6.4(3); and Paragraph (d)(6)(i), Condition B.6.4(12), Table III.B of this Title V operating permit (40 CFR §§63.163(e)(6)(i), 63.164(e)(2), and 63.173(d)(6)(i)) and an explanation of the design criteria; and
  (B) Any changes to these criteria and the reasons for the changes.

(7) The following information pertaining to all pumps subject to the provisions of Condition B.6.4(2) (40 CFR §63.163(j)), valves subject to the provisions of Condition B.6.4(7), Table III.B (40 CFR §63.168(h)) and Paragraph "b.ix", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, agitators subject to the provisions of Condition B.6.4(12), Table III.B (40 CFR §63.173(h) through (j)), and connectors subject to the provisions of Condition B.6.4(13), Table III.B of this Title V operating permit (40 CFR §63.174(f) and (g)) shall be recorded:
  (A) Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment.
  (B) A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment.
  (C) A list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair.

(8) (A) A list of valves removed from and added to the process unit, as described in Condition B.6.4(7), Table III.B of this Title V operating permit (40 CFR §63.168(e)(1)), if the net credits for removed valves is expected to be used.
  (B) A list of connectors removed from and added to the process unit, as described in Paragraph (i), Condition B.6.4(13), Table III.B (40 CFR §63.174(i)(1)), and documentation of the integrity of the weld for any removed connectors, as required in Paragraph (i)(2), Condition B.6.4(13), Table III.B (40 CFR §63.174(j)) of this Title V operating permit. This is not required unless the net credits for removed connectors are expected to be used.

iii. For visual inspections of equipment subject to the provisions of Paragraph (b) and Paragraph (e)(5), Condition B.6.4(2), Table III.B of this Title V operating permit (e.g., 40 CFR §63.163(b)(3), §63.163(e)(4)(i)), the Permittee shall document that the inspection was conducted and the date of the inspection. The Permittee shall maintain records as specified in Paragraph "b.iv" below, Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit for leaking equipment identified in this inspection, except as provided in Paragraph "b.v", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.181(c)].

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.4(1) - B.6.4(15). Equipment Leaks

b. Record Keeping Requirements, Continued

iv. When each leak is detected as specified in Conditions B.6.4(2), (3), (7), (8), (11) - (13), Table III.B of this Title V operating permit (40 CFR §§63.163 and 63.164; §§63.168 and 63.169; and §§63.172 through 63.174), the following information shall be recorded and kept for 5 years [40 CFR §63.181(d) & RCSA §22a-174-33(o)(2)]:

(1) The instrument and the equipment identification number and the operator name, initials, or identification number.

(2) The date the leak was detected and the date of first attempt to repair the leak.

(3) The date of successful repair of the leak.

(4) Maximum instrument reading measured by Method 21 of 40 CFR Part 60, Appendix A after it is successfully repaired or determined to be non-repairable.

(5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(A) The Permittee may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by 40 CFR §63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

(B) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.

(6) Dates of process unit shutdowns that occur while the equipment is not repaired.

(7) (A) Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in Paragraph (b), Condition B.6.4(13), Table III.B of this Title V operating permit (40 CFR §63.174(b)), as described in Paragraph (c)(1)(i), Condition B.6.4(13), Table III.B (40 CFR §63.174(c)(1)), unless the Permittee elects to comply with the provisions of Paragraph (c)(1)(ii), Condition B.6.4(13), Table III.B of this Title V operating permit (40 CFR §63.174(c)(1)(ii)).

(B) The date and results of monitoring as required in Paragraph (c), Condition B.6.4(13), Table III.B of this Title V operating permit (40 CFR §63.174(c)). If identification of connectors that have been opened or otherwise had the seal broken is made by location under Paragraph "b.iv.(7)(A)", above, Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, then all connectors within the designated location shall be monitored.

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.4(1) - B.6.4(15). Equipment Leaks

b. Record Keeping Requirements, Continued

(8) Copies of the periodic reports as specified in Paragraph "c", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.182(d)), if records are not maintained on a computerized database capable of generating summary reports from the records.

v. The Permittee of a batch product process who elects to pressure test the batch product process equipment train to demonstrate compliance is exempt from the requirements of Paragraphs "b.ii", "b.iii", "b.iv", and "b.vi", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. Instead, the Permittee shall maintain records of the following information [40 CFR §63.181(e)]:

(1) The identification of each product, or product code, produced during the calendar year. It is not necessary to identify individual items of equipment in a batch product process equipment train.

(2) Physical tagging of the equipment to identify that it is in organic HAP service and subject to the provisions of Conditions B.6.4(1) - B.6.4(15), Table III.B (Subpart H) of this Title V operating permit is not required. Equipment in a batch product process subject to the provisions of Conditions B.6.4(1) - B.6.4(15), Table III.B (Subpart H) of this Title V operating permit may be identified on a plant site plan, in log entries, or by other appropriate methods.

(3) Records of any visible, audible, or olfactory evidence of fluid loss.

(4) When a batch product process equipment train does not pass two consecutive pressure tests, the following information shall be recorded in a log and kept for 2 years:

(A) The date of each pressure test and the date of each leak repair attempt.

(B) Repair methods applied in each attempt to repair the leak.

(C) The reason for the delay of repair.

(D) The expected date for delivery of the replacement equipment and the actual date of delivery of the replacement equipment.

(E) The date of successful repair.

vi. The dates and results of each compliance test required for compressors subject to the provisions in Paragraph (i), Condition B.6.4(3), Table III.B of this Title V operating permit (40 CFR §63.164(i)) and the dates and results of the monitoring following a pressure release for each pressure relief device subject to the provisions in Paragraphs (a) and (b), Condition B.6.4(4), Table III.B of this Title V operating permit (40 CFR §§63.165(a) and (b)). The results shall include [40 CFR §63.181(f)]:

(1) The background level measured during each compliance test.

(2) The maximum instrument reading measured at each piece of equipment during each compliance test.

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.4(1) - B.6.4(15). Equipment Leaks

b. Record Keeping Requirements, Continued

vii. The Permittee shall maintain records of the information specified in Paragraphs "b.vii.(1)" through "b.vii.(3)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit for closed-vent systems and control devices subject to the provisions of Condition B.6.4(11), Table III.B of this Title V operating permit (40 CFR §63.172). The records specified in Paragraph "b.vii.(1)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit shall be retained for the life of the equipment. The records specified in Paragraphs "b.vii.(2)" and "b.vii.(3)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit shall be retained for 2 years [40 CFR §63.181(g)].

(1) The design specifications and performance demonstrations specified in Paragraphs "b.vii.(1)(A)" through "b.vii.(1)(D)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.
   (A) Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams.
   (B) The dates and descriptions of any changes in the design specifications.
   (C) The flare design (i.e., steam-assisted, air-assisted, or non-assisted) and the results of the compliance demonstration required by 40 CFR § 63.11(b) of Subpart A, of Part 63.
   (D) A description of the parameter or parameters monitored, as required in Paragraph (d), Condition B.6.4(11), Table III.B of this Title V operating permit (40 CFR §63.172(e)), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.

(2) Records of operation of closed-vent systems and control devices, as specified in Paragraphs "b.vii.(2)(i)" through "b.vii.(2)(iii)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.
   (A) Date and duration when the closed-vent systems and control devices required in Conditions B.6.4(2) - B.6.4(5) and B.6.4(9), Table III.B, of this Title V operating permit (40 CFR §§63.163 through 63.166, and §63.170) are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame.
   (B) Date and duration during which the monitoring system or monitoring device is inoperative.
   (C) Date and duration of start-ups and shutdowns of control devices required in Conditions B.6.4(2) - B.6.4(5) and B.6.4(9), Table III.B, of this Title V operating permit (40 CFR §63.163 through 63.166, and §63.170).

(3) Records of inspections of closed-vent systems subject to the provisions of Condition B.6.4(11), Table III.B of this Title V operating permit (40 CFR §63.172), as specified in Paragraphs "b.vii.(3)(A)" and "b.vii.(3)(B)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.4(1) - B.6.4(15). Equipment Leaks

b. Record Keeping Requirements, Continued

(A) For each inspection conducted in accordance with the provisions of Paragraph (f)(1) or (f)(2), Condition B.6.4(11), Table III.B of this Title V operating permit (40 CFR §63.172(f)(1) or (f)(2)) during which no leaks were detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(B) For each inspection conducted in accordance with the provisions of Paragraph (f)(1) or (f)(2), Condition B.6.4(11), Table III.B of this Title V operating permit (40 CFR §63.172(f)(1) or (f)(2)) during which leaks were detected, the information specified in Paragraph "b.iv", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit shall be recorded.

viii. Each Permittee of a process unit subject to the requirements of Conditions B.6.4(14) and B.6.4(15), Table III.B of this Title V operating permit (40 CFR §§63.175 and 63.176) shall maintain the records specified in Paragraphs "b.viii.(1)" through "b.viii.(9)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit for the period of the quality improvement program for the process unit [40 CFR §63.181(h)].

(1) If the Permittee elects to use a reasonable further progress quality improvement program, as specified in Paragraph (d), Condition B.6.4(14), Table III.B of this Title V operating permit [40 CFR §63.175(d)]:

(A) All data required in Paragraph (d)(2), Condition B.6.4(14), Table III.B of this Title V operating permit.

(B) The percent leaking valves observed each quarter and the rolling average percent reduction observed in each quarter.

(C) The beginning and ending dates while meeting the requirements of Paragraph (d), Condition B.6.4(14), Table III.B of this Title V operating permit (40 CFR §63.175(d)).

(2) If the Permittee elects to use a quality improvement program of technology review and improvement, as specified in Paragraph (e), Condition B.6.4(14), Table III.B of this Title V operating permit (40 CFR §63.175(e)):

(A) All data required in Paragraph (e)(2), Condition B.6.4(14), Table III.B of this Title V operating permit.

(B) The percent leaking valves observed each quarter.

(C) Documentation of all inspections conducted under the requirements of Paragraph (e)(4), Condition B.6.4(14), Table III.B of this Title V operating permit (40 CFR §63.175(e)(4)), and any recommendations for design or specification changes to reduce leak frequency.

(D) The beginning and ending dates while meeting the requirements of Paragraph (e), Condition B.6.4(14), Table III.B of this Title V operating permit (40 CFR §63.175(e)).

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.4(1) - B.6.4(15). Equipment Leaks

b. Record Keeping Requirements, Continued

(3) The Permittee is subject to the requirements of the pump quality improvement program as specified in Condition B.6.4(15), Table III.B of this Title V operating permit (40 CFR §63.176):
   (A) All data required in Paragraph (d)(2), Condition B.6.4(15), Table III.B of this Title V operating permit (40 CFR §63.176(d)(2)).
   (B) The rolling average percent leaking pumps.
   (C) Documentation of all inspections conducted under the requirements of Paragraph (d)(4), Condition B.6.4(15), Table III.B of this Title V operating permit (40 CFR §63.176(d)(4)), and any recommendations for design or specification changes to reduce leak frequency.
   (D) The beginning and ending dates while meeting the requirements of Paragraph (d), Condition B.6.4(15), Table III.B of this Title V operating permit (40 CFR §63.176(d)).

(4) If a leak is not repaired within 15 calendar days after discovery of the leak, the reason for the delay and the expected date of successful repair.

(5) Records of all analyses required in Paragraph (e), Condition B.6.4(14) and Paragraph (d), Condition B.6.4(15), Table III.B of this Title V operating permit (40 CFR §§63.175(e) and 63.176(d)). The records will include the following:
   (A) A list identifying areas associated with poorer than average performance and the associated service characteristics of the stream, the operating conditions and maintenance practices.
   (B) The reasons for rejecting specific candidate superior emission performing valve or pump technology from performance trials.
   (C) The list of candidate superior emission performing valve or pump technologies, and documentation of the performance trial program items required under Paragraph (e)(6)(iii), Condition B.6.4(14) and Paragraph (d)(6)(iii), Condition B.6.4(15), Table III.B of this Title V operating permit (40 CFR §§63.175(e)(6)(iii) and 63.176(d)(6)(iii)).
   (D) The beginning date and duration of performance trials of each candidate superior emission performing technology.

(6) All records documenting the quality assurance program for valves or pumps as specified in under Paragraph (e)(7), Condition B.6.4(14) and Paragraph (d)(7), Condition B.6.4(15), Table III.B of this Title V operating permit (40 CFR §§63.175(e)(7) and 63.176(d)(7)).

(7) Records indicating that all valves or pumps replaced or modified during the period of the quality improvement program are in compliance with the quality assurance requirements in under Paragraph (e)(7), Condition B.6.4(14) and Paragraph (d)(6), Condition B.6.4(15), Table III.B of this Title V operating permit (40 CFR §63.175(e)(7) and § 63.176(d)(6)).

(8) Records documenting compliance with the 20% or greater annual replacement rate for pumps as specified in Paragraph (d)(8), Condition B.6.4(15), Table III.B of this Title V operating permit (40 CFR §63.176(d)(8)).

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.4(1) - B.6.4(15). Equipment Leaks

b. Record Keeping Requirements, Continued

(9) Information and data to show the corporation has fewer than 100 employees, including employees providing professional and technical contracted services.

ix. The Permittee of equipment in heavy liquid service shall comply with the requirements of either Paragraph "b.ix.(1)" or "b.ix.(2)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, as provided in Paragraph "b.ix.(3)", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.181(i)].

(1) Retain information, data, and analyses used to determine that a piece of equipment is in heavy liquid service.

(2) When requested by the Administrator, demonstrate that the piece of equipment or process is in heavy liquid service.

(3) A determination or demonstration that a piece of equipment or process is in heavy liquid service shall include an analysis or demonstration that the process fluids do not meet the definition of "in light liquid service." Examples of information that could document this include, but are not limited to, records of chemicals purchased for the process, analyses of process stream composition, engineering calculations, or process knowledge.

x. Identification, either by list, location (area or group) of equipment in organic HAP service less than 300 hours per year within a process unit subject to the provisions of Conditions B.6.4(1) - B.6.4(15), Table III.B of this Title V operating permit (40 CFR §63.160) [40 CFR §63.181(j)].

c. Reporting Requirements

i. The Permittee shall submit the reports listed in Paragraph "c.i.(1)" below, Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.182(a) & §63.1331(a)].

(1) Periodic Reports described in Paragraph "c.iii", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A"
GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER
GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.4(1) - B.6.4(15). Equipment Leaks

c. Reporting Requirements, Continued

ii. The Permittee shall submit Periodic Reports [40 CFR §63.182(d)]. Such report may be submitted as part of the Periodic Reports required by Paragraph "c.iv.(5)" ("*General Record Keeping and Reporting*"), Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.1335(e)(6)) [40 CFR §63.182(d)].

(1) A report containing the information in Paragraphs "c.ii.(2)" and "c.ii.(3)", below, Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit shall be submitted semiannually starting 6 months after the Notification of Compliance Status, as required in Paragraph "c.ii", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. The first periodic report shall cover the first 6 months after the compliance date specified in 40 CFR §63.100(k)(3) of Subpart F (Group 1: October 24, 1994; Group II: January 23, 1995.) Each subsequent periodic report shall cover the 6-month period following the preceding period.

(2) For each process unit complying with the provisions of Conditions B.6.4(2) - B.6.4(13), Table III.B of this Title V operating permit (40 CFR §63.163 through §63.174), the summary information listed in Items (A) through (O) of this Paragraph for each monitoring period during the 6-month period.

(A) The number of valves for which leaks were detected as described in Paragraph (b), Condition B.6.4(7), Table III.B of this Title V operating permit (40 CFR §63.168(b)), the % leakers, and the total number of valves monitored;

(B) The number of valves for which leaks were not repaired as required in Paragraph (f), Condition B.6.4(7), Table III.B of this Title V operating permit (40 CFR §63.168(f)), identifying the number of those that are determined non-repairable;

(C) The number of pumps for which leaks were detected as described in Paragraph (b), Condition B.6.4(2), Table III.B of this Title V operating permit (40 CFR §63.163(b)), the % leakers, and the total number of pumps monitored;

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.4(1) - B.6.4(15). Equipment Leaks

c. Reporting Requirements, Continued

(D) The number of pumps for which leaks were not repaired as required in Paragraph (c), Condition B.6.4(2), Table III.B of this Title V operating permit (40 CFR §63.163(c));

(E) The number of compressors for which leaks were detected as described in Paragraph (f), Condition B.6.4(3), Table III.B of this Title V operating permit (40 CFR §63.164(f));

(F) The number of compressors for which leaks were not repaired as required in Paragraph (g), Condition B.6.4(3), Table III.B of this Title V operating permit (40 CFR §63.164(g));

(G) The number of agitators for which leaks were detected as described in Paragraph (a) and (b), Condition B.6.4(12), Table III.B of this Title V operating permit (40 CFR §63.173(a) and (b));

(H) The number of agitators for which leaks were not repaired as required in Paragraph (c), Condition B.6.4(12), Table III.B of this Title V operating permit (40 CFR §63.173(c));

(I) The number of connectors for which leaks were detected as described in Paragraph (a), Condition B.6.4(13), Table III.B of this Title V operating permit (40 CFR §63.174(a)), the % of connectors leaking, and the total number of connectors monitored;

(J) The number of connectors for which leaks were not repaired as required in Paragraph (d), Condition B.6.4(13), Table III.B of this Title V operating permit (40 CFR §63.174(d)), identifying the number of those that are determined non-repairable;

(K) The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible;

(L) The results of all monitoring to show compliance with Paragraph (i), Condition B.6.4(3); Paragraph (a), Condition B.6.4(4); and Paragraph (f), Condition B.6.4(11), Table III.B of this Title V operating permit (40 CFR §§63.164(i), 63.165(a), and 63.172(f)) conducted within the semiannual reporting period;

(M) If applicable, the initiation of a monthly monitoring program under Paragraph (d)(1)(i), Condition B.6.4(7), Table III.B of this Title V operating permit (40 CFR §63.168(d)(1)(i)), or a quality improvement program under either Condition B.6.4(14) or Condition B.6.4(15), Table III.B of this Title V operating permit (40 CFR §§63.175 or 63.176);

(N) If applicable, notification of a change in connector monitoring alternatives as described in Paragraph (c)(1), Condition B.6.4(13), Table III.B of this Title V operating permit (40 CFR §63.174(c)(1)); and

(O) If applicable, the compliance option that has been selected under Paragraph (n), Condition B.6.4(11), Table III.B of this Title V operating permit (40 CFR §63.172(n)).

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.4(1) - B.6.4(15). Equipment Leaks

c. Reporting Requirements, Continued

(3) The information listed in Paragraph "c.ii", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit for the Notification of Compliance Status for process units with later compliance dates. Any revisions to items reported in earlier Notification of Compliance Status, if the method of compliance has changed since the last report.

B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

a. Additional Test Methods/Procedures

i. The Administrator may require the Permittee to conduct performance tests at the affected source at any other time when the action is authorized by Section 114 of the Act [40 CFR §63.7(a)(3) & §63.1333(a)].

ii. Performance testing shall be conducted in accordance with Paragraph "a.i" above, and Paragraphs "a.ii" through "a.v" below, (*Additional Test Methods/Procedures*) Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15) with the exceptions specified in Paragraphs "a.vi.(1)" through "a.vi.(5)" Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.1333(a)].

iii. *Performance testing facilities [40 CFR §63.1333(a) and 40 CFR §63.7(d)].* If required to do performance testing, the Permittee of each new source and of each existing source, at the request of the Administrator, shall provide performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such source. This includes:

(A) Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

(B) Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures;

(2) Safe sampling platform(s);

(3) Safe access to sampling platform(s);

(4) Utilities for sampling and testing equipment; and

(5) Any other facilities that the Administrator deems necessary for safe and adequate testing of a source.

iv. *Conduct of performance tests [40 CFR §63.1333(a) and 40 CFR §63.7(e)].* Performance tests shall be conducted according to the provisions in Paragraphs "a.iv.(1)" through "a.iv.(4)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.1333(a)(1)]. The Permittee shall notify the Administrator of the intention to conduct a performance test at least 30-calendar days before the performance test is scheduled to allow the Administrator the

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B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

a. Additional Test Methods/Procedures, Continued

opportunity to have an observer present during the test [40 CFR §63.1333(a)(4)]. Data shall be reduced in accordance with US EPA approved methods specified in the applicable subpart or, if other test methods are used, the data and methods shall be validated according to the protocol in Method 301 of Appendix A of 40 CFR Part 63 [40 CFR 63.1333(d)].

(1) Performance tests shall be conducted under such conditions as the Administrator specifies to the Permittee based on maximum representative operating conditions (i.e., performance based on normal operating conditions) of the affected source. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test, nor shall emissions in excess of the level of the relevant standard during periods of startup, shutdown, and malfunction be considered a violation of the relevant standard unless otherwise specified in the relevant standard or a determination of noncompliance is made under 40 CFR §63.6(e). Upon request, the Permittee shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(2) Performance tests shall be conducted and data shall be reduced in accordance with the test methods and procedures set forth in this section, in each relevant standard, and, if required, in applicable appendices of Parts 51, 60, 61, and 63 of Chapter 40 CFR unless the Administrator --

(A) Specifies or approves, in specific cases, the use of a test method with minor changes in methodology (see definition in 40 CFR §63.90(a)). Such changes may be approved in conjunction with approval of the site-specific test plan (see Paragraph "a.iii", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit); or

(B) Approves the use of an intermediate or major change or alternative to a test method (see definitions in 40 CFR §63.90(a)), the results of which the Administrator has determined to be adequate for indicating whether a specific affected source is in compliance; or

(C) Approves shorter sampling times or smaller sample volumes when necessitated by process variables or other factors; or

(D) Waives the requirement for performance tests because the Permittee of an affected source has demonstrated by other means to the Administrator's satisfaction that the affected source is in compliance with the relevant standard.

(3) Unless otherwise specified in a relevant standard or test method, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the relevant standard. For the purpose of determining compliance with a relevant standard, the arithmetic mean of the results of the three runs shall apply. Upon receiving approval from the Administrator, results of a test run may be replaced with results of an additional test run in the event that --

(A) A sample is accidentally lost after the testing team leaves the site; or

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B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

a. Additional Test Methods/Procedures, Continued

(B) Conditions occur in which one of the three runs must be discontinued because of forced shutdown; or
(C) Extreme meteorological conditions occur; or
(D) Other circumstances occur that are beyond the Permittee's control.

(4) Nothing in Paragraphs "a.ii.(1)" through "a.ii.(3)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit shall be construed to abrogate the Administrator's authority to require testing under Section 114 of the Act.

v. *Data analysis, record keeping, and reporting [40 CFR §63.1333(a) and 40 CFR §63.7(g)].*

(1) Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, results of a performance test shall include the analysis of samples, determination of emissions, and raw data. A performance test is "completed" when field sample collection is terminated. The Permittee shall report the results of the performance test to the Administrator before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator (see 40 CFR §63.9(i)). The results of the performance test shall be submitted as part of the notification of compliance status required under 40 CFR §63.9(h). Before a Title V permit has been issued to the owner or operator of an affected source, the Permittee shall send the results of the performance test to the Administrator. After a Title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the appropriate permitting authority.

(2) For a minimum of 5 years after a performance test is conducted, the Permittee shall retain and make available, upon request, for inspection by the Administrator the records or results of such performance test and other data needed to determine emissions from an affected source.

vi. *Waiver of performance tests [40 CFR §63.1333(a) and 40 CFR §63.7(h)].*

(1) Until a waiver of a performance testing requirement has been granted by the Administrator under this paragraph, the Permittee of an affected source remains subject to the requirements of this section.

(2) Individual performance tests may be waived upon written application to the Administrator if, in the Administrator's judgment, the source is meeting the relevant standard(s) on a continuous basis, or the source is being operated under an extension of compliance, or the Permittee has requested an extension of compliance and the Administrator is still considering that request.

(3) *Request to waive a performance test.*

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B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

a. Additional Test Methods/Procedures, Continued

(A) If a request is made for an extension of compliance under 40 CFR §63.6(i), the application for a waiver of an initial performance test shall accompany the information required for the request for an extension of compliance. If no extension of compliance is requested or if the Permittee has requested an extension of compliance and the Administrator is still considering that request, the application for a waiver of an initial performance test shall be submitted at least 60 days before the performance test if the site-specific test plan under Paragraph "a.iii", Condition B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit is not submitted.

(B) If an application for a waiver of a subsequent performance test is made, the application may accompany any required compliance progress report, compliance status report, or excess emissions and continuous monitoring system performance report (such as those required under 40 CFR §63.6(i), §63.9(h), and §63.10(e) or specified in a relevant standard or in the source's Title V permit), but it shall be submitted at least 60 days before the performance test if the site-specific test plan required under Paragraph "a.iii", Condition B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit is not submitted.

(C) Any application for a waiver of a performance test shall include information justifying the Permittee's request for a waiver, such as the technical or economic unfeasibility, or the impracticality, of the affected source performing the required test.

(4) *Approval of request to waive performance test.* The Administrator will approve or deny a request for a waiver of a performance test made under Paragraph "a.vi.(3)", Condition B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit when he/she --

(A) Approves or denies an extension of compliance under 40 CFR §63.6(i)(8); or

(B) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or

(C) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

(5) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the Permittee of the affected source.

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B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

b. Parametric Monitoring Levels and Excursions

i. *Establishment of parameter monitoring levels.* The Permittee of a control or recovery device that has one or more parameter monitoring level requirements specified under Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15),Table III.B of this Title V operating permit (Subpart JJJ) shall establish a maximum or minimum level for each measured parameter. If a performance test is required by Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Table III.B of this Title V operating permit (Subpart JJJ) for a control device, the Permittee shall use the procedures in either Paragraph "b.ii" or "b.iii", (*Parametric Monitoring Levels and Excursions*) Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit to establish the parameter monitoring level(s). If a performance test is not required by Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15) (Subpart JJJ) for a control device, the Permittee may use the procedures in Paragraph "b.ii", "b.iii" or "b.iv", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit to establish the parameter monitoring level(s). When using the procedures specified in Paragraph "b.iii" or "b.iv" (*Parametric Monitoring Levels and Excursions*), Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, the Permittee shall submit the information specified in Paragraph "c.iv.(3)(G)", (*General Record Keeping and Reporting*), Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.1335(e)(3)(vii)) for review and approval as part of the Pre-compliance Report [40 CFR §63.1334(a)].

(1) The Permittee shall operate control and recovery devices such that the daily average of monitored parameters remains above the minimum established level or below the maximum established level, except as otherwise stated in Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15) (Subpart JJJ) [40 CFR §63.1334(a)(1)].

(2) As specified in Paragraph "iv.(5)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.1335(e)(5)), all established levels, along with their supporting documentation and the definition of an operating day, shall be submitted as part of the Notification of Compliance Status [40 CFR §63.1334(a)(2)].

(3) Nothing in this Paragraph "b", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit shall be construed to allow a monitoring parameter excursion caused by an activity that violates other applicable provisions of Subpart A, F, G, or H of 40 CFR Part 63 [40 CFR §63.1334(a)(3)].

ii. *Establishment of parameter monitoring levels based exclusively on performance tests.* In cases where a performance test is required, or the Permittee of the affected source elects to do a performance test in accordance with the provisions of Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15) (Subpart JJJ), and the Permittee elects to establish a parameter monitoring level for a control, recovery, or

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B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

b. Parametric Monitoring Levels and Excursions, Continued

recapture device based exclusively on parameter values measured during the performance test, the Permittee of the affected source shall comply with the procedures in Paragraphs "b.i.(1)" through "b.ii.(3)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, as applicable [40 CFR §63.1334(b)].

(1) *Batch process vents.* The monitoring level(s) shall be established using the procedures specified in either Paragraph "b.ii.(2)(A)" or "b.ii.(2)(B)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. The procedures specified in this Paragraph "b.ii.(3)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit may only be used if the batch emission episodes, or portions thereof, selected to be controlled were tested, and monitoring data were collected, during the entire period in which emissions were vented to the control device, as specified in 40 CFR §63.1325(c)(1)(i). If the Permittee chose to test only a portion of the batch emission episode, or portion thereof, selected to be controlled, the procedures in Paragraph "b.iii", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit shall be used [40 CFR §63.1334(b)(2)].

(A) If more than one batch emission episode or more than one portion of a batch emission episode has been selected to be controlled, a single level for the batch cycle shall be calculated as follows:

(i) The average monitored parameter value shall be calculated for each batch emission episode, or portion thereof, in the batch cycle selected to be controlled. The average shall be based on all values measured during the required performance test.

(ii) If the level to be established is a maximum operating parameter, the level shall be defined as the minimum of the average parameter values of the batch emission episodes, or portions thereof, in the batch cycle selected to be controlled (*i.e.*, identify the emission episode, or portion thereof, which requires the lowest parameter value in order to assure compliance. The average parameter value that is necessary to assure compliance for that emission episode, or portion thereof, shall be the level for all emission episodes, or portions thereof, in the batch cycle, that are selected to be controlled).

(iii) If the level to be established is a minimum operating parameter, the level shall be defined as the maximum of the average parameter values of the batch emission episodes, or portions thereof, in the batch cycle selected to be controlled (*i.e.*, identify the emission episode, or portion thereof, which requires the highest parameter value in order to assure compliance. The average parameter value that is necessary to assure compliance for that emission episode, or portion thereof, shall be the level for all emission episodes, or portions thereof, in the batch cycle, that are selected to be controlled).

(iv) Alternatively, an average monitored parameter value shall be calculated for the entire batch cycle based on all values measured during each batch emission episode, or portion thereof, selected to be controlled.

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B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

b. Parametric Monitoring Levels and Excursions, Continued

(B) Instead of establishing a single level for the batch cycle, as described in Paragraph "b.ii.(2)(A)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration of this Title V operating permit, the Permittee may establish separate levels for each batch emission episode, or portion thereof, selected to be controlled. Each level shall be determined as specified in Paragraph "b.ii.(2)(A)(i)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(C) The batch cycle shall be defined in the Notification of Compliance Status, as specified in Paragraph "c.iv.(5)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.1335(e)(5)). Said definition shall include an identification of each batch emission episode and the information required to determine parameter monitoring compliance for partial batch cycles (i.e., when part of a batch cycle is accomplished during two different operating days).

(2) *Aggregate batch vent streams.* For aggregate batch vent streams, the monitoring level shall be established in accordance with Paragraph "b.ii.(2)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.1334(b)(3)].

iii. *Establishment of parameter monitoring levels based on performance tests, supplemented by engineering assessments and/or manufacturers recommendations.* In cases where a performance test is required by Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Table III.B (Subpart JJJ), or the Permittee elects to do a performance test in accordance with the provisions of Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Table III.B of this Title V operating permit (Subpart JJJ), and the Permittee elects to establish a parameter monitoring level for a control, recovery, or recapture device under this Paragraph "b.iii", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, the Permittee shall supplement the parameter values measured during the performance test with engineering assessments and/or manufacturers recommendations. Performance testing is not required to be conducted over the entire range of expected parameter values [40 CFR §63.1334(c)].

iv. *Establishment of parameter monitoring based on engineering assessments and/or manufacturers recommendations.* In cases where a performance test is not required by Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Table III.B (Subpart JJJ) and the Permittee elects to establish a parameter monitoring level for a control, recovery, or recapture device under this Paragraph "b.iv", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, the determination of the parameter monitoring level shall be based exclusively on engineering assessments and/or manufacturers recommendations [40 CFR §63.1334(d)].

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B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

b. Parametric Monitoring Levels and Excursions, Continued

iv. *Parameter monitoring excursion definitions* [40 CFR §63.1334(f)].

(1) With respect to storage vessels (where the applicable monitoring plan specifies continuous monitoring), continuous process vents, aggregate batch vent streams, and process wastewater streams, an excursion means any of the three cases listed in Paragraphs "b.iv.(1)(A)" - "b.iv.(1)(C)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. For a control or recovery device where multiple parameters are monitored, if one or more of the parameters meets the excursion criteria in Paragraphs "b.iv.(1)(A)" through "b.iv.(1)(C)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, this is considered a single excursion for the control or recovery device. For each excursion, the Permittee shall be deemed out of compliance with the provisions of Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Table III.B of this Title V operating permit (Subpart JJJ), except as provided in Paragraph "b.v", Condition B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.1334(f)(1)].

(A) When the daily average value of one or more monitored parameters is above the maximum level or below the minimum level established for the given parameters.

(B) When the period of control or recovery device operation, with the exception noted in Paragraph "b.iv.(1)(E)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, is 4 hours or greater in an operating day, and monitoring data are insufficient, as defined in Paragraph "b.iv.(1)(D)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, to constitute a valid hour of data for at least 75% of the operating hours.

(C) When the period of control or recovery device operation, with the exception noted in Paragraph "b.iv.(1)(E)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, is less than 4 hours in an operating day and more than two of the hours during the period of operation do not constitute a valid hour of data due to insufficient monitoring data, as defined in Paragraph "b.iv.(1)(D)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(D) Monitoring data are insufficient to constitute a valid hour of data, as used in Paragraphs "b.iv.(1)(B)" and "b.iv.(1)(C)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, if

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

b. Parametric Monitoring Levels and Excursions, Continued

measured values are unavailable for any of the 15-minute periods within the hour. For data compression systems approved under Paragraph "c.vii.(3)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.1335(g)(3)), monitoring data are insufficient to calculate a valid hour of data if there are less than four data measurements made during the hour.

(E) The periods listed in Paragraphs "b.iv.(1)(E)(i)" through "b.iv.(1)(E)(v)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, are not considered to be part of the period of control or recovery device operation, for the purposes of Paragraphs "b.iv.(1)(B)" and "b.iv.(1)(C)" above, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(i) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments;
(ii) Start-ups;
(iii) Shutdowns;
(iv) Malfunctions; or
(v) Periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies.

(2) With respect to batch process vents, an excursion means one of the two cases listed in Paragraphs "b.iv.(2)(A)" and "b.iv.(2)(B)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. For a control device where multiple parameters are monitored, if one or more of the parameters meets the excursion criteria in either Paragraph "b.iv.(2)(A)" or "b.iv.(2)(B)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, this is considered a single excursion for the control device. For each excursion, the Permittee shall be deemed out of compliance with the provisions of Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15) (Subpart JJJ), except as provided in Paragraph "b.v", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.1334(f)(2)].

(A) When the batch cycle daily average value of one or more monitored parameters is above the maximum or below the minimum established level for the given parameters.
(B) When monitoring data are insufficient for an operating day. Monitoring data shall be considered insufficient when measured values are not available for at least 75 percent of the 15-minute periods when batch emission episodes selected to be controlled

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- **COMPLIANCE DEMONSTRATION**

B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

b. Parametric Monitoring Levels and Excursions, Continued

are being vented to the control device during the operating day, using the procedures specified in Paragraphs "b.iv.(2)(B)(i)" through "b.iv.(2)(B)(iv)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(i) Determine the total amount of time during the operating day when batch emission episodes selected to be controlled are being vented to the control device.

(ii) Subtract the time during the periods listed in Paragraphs "b.iv.(2)(B)(ii)(a)" through "b.iv.(2)(B)(ii)(d)", Condition B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit from the total amount of time determined in Paragraph "b.iv.(2)(B)(i)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, to obtain the operating time used to determine if monitoring data are insufficient.

(a) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments;
(b) Start-ups;
(c) Shutdowns; or
(d) Malfunctions.

(iii) Determine the total number of 15-minute periods in the operating time used to determine if monitoring data are insufficient, as was determined in accordance with Paragraph "b.iv.(2)(B)(ii)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(iv) If measured values are not available for at least 75% of the total number of 15-minute periods determined in Paragraph "b.iv.(2)(B)(iii)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, the monitoring data are insufficient for the operating day.

(3) For storage vessels where the applicable monitoring plan does not specify continuous monitoring, an excursion is defined in Paragraph "b.iv.(3)(A)" or "b.iv.(3)(B)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, as applicable. For a control or recovery device where multiple parameters are monitored, if one or more of the parameters meets the excursion criteria, this is considered a single excursion for the control or recovery device. For each excursion, the Permittee shall be deemed out of compliance with the provisions of Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15) (Subpart JJJ), Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit,

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B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

b. Parametric Monitoring Levels and Excursions, Continued

except as provided in Paragraph "b.v", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.1334(f)(3)].

(A) If the monitoring plan specifies monitoring a parameter and recording its value at specific intervals (such as every 15 minutes or every hour), either of the cases listed in Paragraph "b.iv.(3)(A)(i)" or "b.iv.(3)(A)(ii)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, is considered a single excursion for the control device. For each excursion, the Permittee shall be deemed out of compliance with the provisions of Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15) (Subpart JJJ), Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit except as provided in Paragraph "b.v", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(i) When the average value of one or more parameters, averaged over the duration of the filling period for the storage vessel, is above the maximum level or below the minimum level established for the given parameters.

(ii) When monitoring data are insufficient. Monitoring data shall be considered insufficient when measured values are not available for at least 75% of the specific intervals at which parameters are to be monitored and recorded, according to the storage vessel's monitoring plan, during the filling period for the storage vessel.

(B) If the monitoring plan does not specify monitoring a parameter and recording its value at specific intervals (for example, if the relevant operating requirement is to exchange a disposable carbon canister before expiration of its rated service life), the monitoring plan shall define an excursion in terms of the relevant operating requirement.

(4) With respect to new affected sources producing styrene acrylonitrile resin (SAN) using a batch process, an excursion has occurred when the % reduction calculated using the procedures specified in Paragraph "a.iii", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.1333(c)) is less than 84%. For each excursion, the Permittee shall be deemed out of compliance with the provisions of Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15) (Subpart JJJ), Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit except as provided in Paragraph "b.v", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. The periods listed in Paragraphs "b.iv.(4)(A)" through "b.iv.(4)(E)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit are not considered to be part of the period of control or recovery device operation for purposes of determining the % reduction [40 CFR §63.1334(f)(6)].

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

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B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

b. Parametric Monitoring Levels and Excursions, Continued

(A) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments;
(B) Start-ups;
(C) Shutdowns;
(D) Malfunctions; or
(E) Periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies.

v. *Excused excursions.* A number of excused excursions shall be allowed for each control or recovery device for each semiannual period. The number of excused excursions for each semiannual period is specified in Paragraphs "b.v.(1)" through "b.v.(6)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. This Paragraph "b.v", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, applies to affected sources required to submit Periodic Reports semiannually or quarterly. The first semiannual period is the 6-month period starting the date the Notification of Compliance Status is due [40 CFR §63.1334(g)].

(1) For the first semiannual period -- six excused excursions [40 CFR §63.1334(g)(1)].
(2) For the second semiannual period -- five excused excursions [40 CFR §63.1334(g)(2)].
(3) For the third semiannual period -- four excused excursions [40 CFR §63.1334(g)(3)].
(4) For the fourth semiannual period -- three excused excursions [40 CFR §63.1334(g)(4)].
(5) For the fifth semiannual period -- two excused excursions [40 CFR §63.1334(g)(5)].
(6) For the sixth and all subsequent semiannual periods -- one excused excursion [40 CFR §63.1334(g)(6)].

c. General Record Keeping and Reporting

i. *Data retention.* Unless otherwise specified in Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (Subpart JJJ), the Permittee shall keep copies of all applicable records and reports required by Subpart JJJ for at least 5 years, as specified in Paragraph "c.i.(1)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit with the exception listed in Paragraph "c.i.(2)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.1335(a)].

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

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B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

c. General Record Keeping and Reporting, Continued

(1) All applicable records shall be maintained in such a manner that they can be readily accessed. The most recent 6 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provides access within 2 hours after a request. The remaining 4 and one-half years of records may be retained offsite. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

(2) If the Permittee submits copies of reports to the appropriate US EPA Regional Office, the Permittee is not required to maintain copies of reports. If the US EPA Regional Office has waived the requirement of 40 CFR §63.10(a)(4)(ii) for submittal of copies of reports, the Permittee is not required to maintain copies of those reports.

ii. *Requirements of Subpart A of Part 63.* The Permittee shall comply with the applicable record keeping and reporting requirements in Subpart A, 40 CFR Part 63 as specified in Table 1. These requirements include, but are not limited to, the requirements specified in Paragraphs "c.ii.(1)" and "c.ii.(2)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.1335(b)].

(1) *Start-up, shutdown, and malfunction plan.* The Permittee shall develop and implement a written start-up, shutdown, and malfunction plan as specified in 40 CFR §63.6(e)(3). This plan shall describe, in detail, procedures for operating and maintaining the affected source during periods of start-up, shutdown, and malfunction and a program for corrective action for malfunctioning process and air pollution control equipment used to comply with this subpart. Inclusion of Group 2 emission points is not required, unless these points are included in an emissions average. For equipment leaks subject to Conditions B.6.4(1) - B.6.4(15), Table III.B of this Title V operating permit (40 CFR §63.1331), the start-up, shutdown, and malfunction plan requirement is limited to control devices and is optional for other equipment. For equipment leaks, the start-up, shutdown, and malfunction plan may include written procedures that identify conditions that justify a delay of repair. A provision for ceasing to collect, during a start-up, shutdown, or malfunction, monitoring data that would otherwise be required by the provisions of this Subpart may be included in the start-up, shutdown, and malfunction plan only if the Permittee has demonstrated to the Administrator, through the Pre-compliance Report or a supplement to the Pre-compliance Report, that the monitoring system would be damaged or destroyed if it were not shut down during the start-up, shutdown, or malfunction. The affected source shall keep the start-up, shutdown, and malfunction plan on-site. Records associated with the plan shall be kept as specified in Paragraphs "c.ii.(1)(A)(i)" through "c.ii.(1)(A)(iii)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. Reports related to the plan shall be submitted as specified in Paragraph "c.ii.(1)(B)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.1335(b)(1)].

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

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B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

c. General Record Keeping and Reporting, Continued

(A) *Records of start-up, shutdown, and malfunction.* The Permittee shall keep the records specified in Paragraphs "c.ii.(1)(A)(i)" through "c.ii.(1)(A)(iii)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(i) Records of the occurrence and duration of each start-up, shutdown, and malfunction of operation of process equipment or control devices or recovery devices or continuous monitoring systems used to comply with this subpart during which excess emissions (as defined in 40 CFR §63.1310(j)(4)) occur.

(ii) For each start-up, shutdown, or malfunction during which excess emissions (as defined in 40 CFR §63.1310(j)(4)) occur, records reflecting whether the procedures specified in the affected source's start-up, shutdown, and malfunction plan were followed, and documentation of actions taken that are not consistent with the plan. For example, if a start-up, shutdown, and malfunction plan includes procedures for routing a control device to a backup control device, records shall be kept of whether the plan was followed. These records may take the form of a "checklist," or other form of record keeping that confirms conformance with the start-up shutdown, and malfunction plan for the event.

(iii) Records specified in Paragraphs "c.ii.(1)(A)(i)" through "c.ii.(1)(A)(ii)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit are not required if they pertain solely to Group 2 emission points that are not included in an emissions average.

(B) *Reports of start-up, shutdown, and malfunction.* For the purposes of this Subpart, the semiannual start-up, shutdown, and malfunction reports shall be submitted on the same schedule as the Periodic Reports required under Paragraph "c.iv.(6)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, instead of being submitted on the schedule specified in 40 CFR §63.10(d)(5)(i). The reports shall include the information specified in 40 CFR §63.10(d)(5)(i).

(2) *Application for approval of construction or reconstruction.* For new affected sources, the Permittee shall comply with the provisions in 40 CFR §63.5 regarding construction and reconstruction, excluding the provisions specified in 40 CFR §63.5(d)(1)(ii)(H), (d)(1)(iii), (d)(2), and (d)(3)(ii) [40 CFR §63.1335(b)(2)].

iii. *Record keeping and documentation.* The Permittee if required to keep continuous records shall keep records as specified in Paragraphs "c.iii.(1)" through "c.iii.(7)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, unless an alternative record keeping system has been requested and approved as specified in Paragraph "c.vi",

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B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

c. General Record Keeping and Reporting, Continued

Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, and except as provided in Paragraph "c.vii", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. If a monitoring plan for storage vessels pursuant to Paragraph (a), Condition B.6.2(3), Table III.B (40 CFR §63.1314(a)(9)) requires continuous records, the monitoring plan shall specify which provisions, if any, of Paragraphs "c.iii.(1)" through "c.iii.(5)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit apply. As described in Paragraph (a), Condition B.6.2(3), Table III.B of this Title V operating permit (40 CFR §63.1314(a)(9)), certain storage vessels are not required to keep continuous records as specified in this paragraph. The Permittee shall keep records as specified in the monitoring plan required by Paragraph (a), Condition B.6.2(3), Table III.B of this Title V operating permit (40 CFR §63.1314(a)(9)). Paragraphs "c.iii.(6)" and "c.iii.(7)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, specify documentation requirements [40 CFR §63.1335(d)].

(1) The monitoring system shall measure data values at least once every 15 minutes.

(2) The Permittee shall record either each measured data value or block average values for 1 hour or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values. Owners or operators of batch process vents shall record each measured data value.

(3) Daily average (or batch cycle daily average) values of each continuously monitored parameter shall be calculated for each operating day as specified in Paragraphs "c.iii.(3)(A)" through "c.iii.(3)(B)" below, except as specified in Paragraphs "c.iii.(4)" and "c.iii.(5)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(A) The daily average value or batch cycle daily average shall be calculated as the average of all parameter values recorded during the operating day, except as specified in Paragraph "c.iii.(5)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. For batch process vents, as specified in 40 CFR §63.1326(e)(2)(i), only parameter values measured during those batch emission episodes, or portions thereof, in the batch cycle that the Permittee has chosen to control shall be used to calculate the average. The calculated average shall cover a 24-hour period if operation is continuous, or the number of hours of operation per operating day if operation is not continuous.

(B) The operating day shall be the period the Permittee specifies in the operating permit or the Notification of Compliance Status for purposes of determining daily average values or batch cycle daily average values of monitored parameters.

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B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

c. General Record Keeping and Reporting, Continued

(4) *Records required when all recorded values are within the established limits.* If all recorded values for a monitored parameter during an operating day are above the minimum level or below the maximum level established in the Notification of Compliance Status or operating permit, the Permittee may record that all values were above the minimum level or below the maximum level rather than calculating and recording a daily average (or batch cycle daily average) for that operating day.

(5) Monitoring data recorded during periods identified in Paragraphs "c.iii.(5)(A)" through "c.iii.(5)(E)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit shall not be included in any average computed under Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Section III.B of this Title V operating permit (Subpart JJJ). Records shall be kept of the times and duration of all such periods and any other periods during process or control device or recovery device operation when monitors are not operating.

(A) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments;
(B) Start-ups;
(C) Shutdowns;
(D) Malfunctions; and
(E) Periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies.

(6) For continuous monitoring systems used to comply with Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (Subpart JJJ), records documenting the completion of calibration checks, and records documenting the maintenance of continuous monitoring systems that are specified in the manufacturers instructions or that are specified in other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

(7) The Permittee granted a waiver under 40 CFR §63.10(f) shall maintain the information, if any, specified by the Administrator as a condition of the waiver of record keeping or reporting requirements.

iv. *Reporting and notification.* In addition to the reports and notifications required by Subpart A of Part 63 as specified in Table 1 of Subpart JJJ, the Permittee shall prepare and submit the reports listed in Paragraphs "c.iv.(3)" through "c.iv.(7)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, as applicable. All reports required under Subpart JJJ, and the schedule for their submittal, are listed in Table 9 of Subpart JJJ [40 CFR §63.1335(e)(1)].

(1) The Permittee shall not be in violation of the reporting requirements of Subpart JJJ for failing to submit information required to be

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B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

c. General Record Keeping and Reporting, Continued

included in a specified report if the Permittee meets the requirements in Paragraphs "c.iv.(1)(A)" through "c.iv.(1)(C)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. Examples of circumstances where this paragraph may apply include information related to newly-added equipment or emission points, changes in the process, changes in equipment required or utilized for compliance with the requirements of Subpart JJJ, or changes in methods or equipment for monitoring, record keeping, or reporting.

(A) The information was not known in time for inclusion in the report specified by Subpart JJJ;

(B) The Permittee has been diligent in obtaining the information; and

(C) The Permittee submits a report according to the provisions of Paragraphs "c.iv.(1)(C)(i)" through "c.iv.(1)(C)(iii)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(i) If Subpart JJJ expressly provides for supplements to the report in which the information is required, the Permittee shall submit the information as a supplement to that report. The information shall be submitted no later than 60 days after it is obtained, unless otherwise specified in Subpart JJJ.

(ii) If Subpart JJJ does not expressly provide for supplements, but the Permittee must submit a request for revision of an operating permit pursuant to 40 CFR Part 70 or Part 71, due to circumstances to which the information pertains, the Permittee shall submit the information with the request for revision to the operating permit.

(iii) In any case not addressed by Paragraph "c.iv.(1)(C)(i)" or "c.iv.(1)(C)(ii)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, the Permittee shall submit the information with the first Periodic Report, as required by Subpart JJJ, which has a submission deadline at least 60 days after the information is obtained.

(2) All reports required under Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (Subpart JJJ) shall be sent to the Administrator at the appropriate address listed in 40 CFR §63.13. If acceptable to both the Administrator and the Permittee of an affected source, reports may be submitted on electronic media [40 CFR §63.1335(e)(2)].

(3) *Pre-compliance Report.* The Permittee requesting an extension for compliance; requesting approval to use alternative monitoring parameters, alternative continuous monitoring and record keeping, or alternative controls; requesting approval to use engineering assessment to estimate emissions from a batch emissions episode, as described in 40 CFR §63.1323(b)(6)(i)(C); wishing to establish

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B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

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parameter monitoring levels according to the procedures contained in Paragraph "b.iii" or "b.iv", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.1334(c) or (d)); or requesting approval to incorporate a provision for ceasing to collect monitoring data, during a start-up, shutdown, or malfunction, into the start-up, shutdown, and malfunction plan, when that monitoring equipment would be damaged if it did not cease to collect monitoring data, as permitted under 40 CFR §63.1310(j)(3), shall submit a Pre-compliance Report according to the schedule described in Paragraph "c.iv.(3)(A)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. The Pre-compliance Report shall contain the information specified in Paragraphs "c.iv.(3)(B)" through "c.iv.(3)(H)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit as appropriate [40 CFR §63.1335(e)(3)].

(A) *Submittal dates.* The Pre-compliance Report shall be submitted to the Administrator no later than December 19, 2000. If a Pre-compliance Report was submitted prior to June 19, 2000 and no changes need to be made to that Pre-compliance Report, the Permittee shall re-submit the earlier report or submit notification that the previously submitted report is still valid. Unless the Administrator objects to a request submitted in the Pre-compliance Report within 45 days after its receipt, the request shall be deemed approved. For new affected sources, the Pre-compliance Report shall be submitted to the Administrator with the application for approval of construction or reconstruction required in Paragraph "c.i.(2)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. Supplements to the Pre-compliance Report may be submitted as specified in Paragraph "c.iv.(3)(I)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(B) A request for an extension for compliance, as specified in 40 CFR §63.1311(e), may be submitted in the Pre-compliance Report. The request for a compliance extension shall include the data outlined in 40 CFR §63.6(i)(6)(i)(A), (B), and (D), as required in 40 CFR §63.1311(e)(1).

(C) The alternative monitoring parameter information required in Paragraph "c.v", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit shall be submitted in the Pre-compliance Report if, for any emission point, the Permittee seeks to comply through the use of a control technique other than those for which monitoring parameters are specified in Subpart JJJ or in Subpart G of Part 63 or seeks to comply by monitoring a different parameter than those specified in Subpart JJJ or in Subpart G of Part 63.

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(D) If the Permittee seeks to comply using alternative continuous monitoring and record keeping as specified in Paragraph "c.vi", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, the Permittee shall submit a request for approval in the Pre-compliance Report.

(E) The Permittee shall report the intent to use alternative controls to comply with the provisions of this subpart in the Pre-compliance Report. The Administrator may deem alternative controls to be equivalent to the controls required by the standard, under the procedures outlined in 40 CFR §63.6(g).

(F) If a request for approval to use engineering assessment to estimate emissions from a batch emissions episode, as described in 40 CFR §63.1323(b)(6)(i)(C) is being made, the information required by 40 CFR §63.1323(b)(6)(iii)(B) shall be submitted in the Pre-compliance Report.

(G) If the Permittee establishes parameter monitoring levels according to the procedures contained in Paragraph "b.iii" or "b.iv", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.1334(c) or (d)), the following information shall be submitted in the Pre-compliance Report:

(i) Identification of which procedures (*i.e.,* Paragraph "b.iii" or "b.iv", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit) are to be used; and

(ii) A description of how the parameter monitoring level is to be established. If the procedures in Paragraph "b.iii", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.1334(c)) are to be used, a description of how performance test data will be used shall be included.

(H) If the Permittee is requesting approval to incorporate a provision for ceasing to collect monitoring data, during a start-up, shutdown, or malfunction, into the start-up, shutdown, and malfunction plan, when that monitoring equipment would be damaged if it did not cease to collect monitoring data, the information specified in Paragraphs "c.iv.(3)(H)(i)" and "c.iv.(3)(H)(ii)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit shall be supplied in the Pre-compliance Report or in a supplement to the Pre-compliance Report. The Administrator shall evaluate the supporting documentation and shall approve the request only if, in the Administrator's judgment, the specific monitoring equipment would be damaged by the contemporaneous start-up, shutdown, or malfunction.

(i) Documentation supporting a claim that the monitoring equipment would be damaged by the contemporaneous start-up, shutdown, or malfunction; and

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B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

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(ii) A request to incorporate such a provision for ceasing to collect monitoring data during a start-up, shutdown, or malfunction, into the start-up, shutdown, and malfunction plan.

(I) Supplements to the Pre-compliance Report may be submitted as specified in Paragraphs "c.iv.(3)(I)(i)" or "c.iv.(3)(I)(ii)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. Unless the Administrator objects to a request submitted in a supplement to the Pre-compliance Report within 45 days after its receipt, the request shall be deemed approved.

(i) Supplements to the Pre-compliance Report may be submitted to clarify or modify information previously submitted.

(ii) Supplements to the Pre-compliance Report may be submitted to request approval to use alternative monitoring parameters, as specified in Paragraph "c.iv.(3)(C)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit; to use alternative continuous monitoring and record keeping, as specified in Paragraph "c.iv.(3)(D)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit; to use alternative controls, as specified in Paragraph "c.iv.(3)(E)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit; to use engineering assessment to estimate emissions from a batch emissions episode, as specified in Paragraph "c.iv.(3)(F)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit; to establish parameter monitoring levels according to the procedures contained in 40 CFR §63.1334(c) or (d), as specified in Paragraph "c.iv.(3)(G)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit; or to include a provision for ceasing to collect monitoring data during a start-up, shutdown, or malfunction, in the start-up, shutdown, and malfunction plan, when that monitoring equipment would be damaged if it did not cease to collect monitoring data, as specified in Paragraph "c.iv.(3)(H)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

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B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

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(4) *Periodic Reports.* For existing and new affected sources, the Permittee shall submit Periodic Reports as specified in Paragraphs "c.iv.(4)(A)" through "c.iv.(4)(K)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. In addition, for equipment leaks subject to Conditions B.6.4(1) - B.6.4(15), Table III.B of this Title V operating permit (40 CFR §63.1331), the Permittee shall submit the information specified in Paragraph "c.iii", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.182(d)) under the conditions listed in Paragraph "c.iii", Conditions B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.182(d)). Paragraph "b", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.1334) shall govern the use of monitoring data to determine compliance for Group 1 emissions points and for Group 1 and Group 2 emission points included in emissions averages with the following exception: As discussed in 40 CFR §63.1314(a)(9), for storage vessels to which the provisions of Paragraph "b", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3,B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.1334) do not apply, as specified in the monitoring plan required by Paragraph (a)(3), Condition B.6.2(3), Table III.B of this Title V operating permit (40 CFR

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B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

c. General Record Keeping and Reporting, Continued

§63.120(d)(2)), the Permittee is required to comply with the requirements set out in the monitoring plan, and monitoring records may be used to determine compliance [40 CFR §63.1335(e)(6)].

(A) Except as specified in Paragraphs "c.iv.(4)(J)" and "c.iv.(4)(K)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, a report containing the information in Paragraph "c.iv.(4)(B)" or containing the information in Paragraphs "c.iv.(4)(C)" through "c.iv.(4)(I)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, as appropriate, shall be submitted semiannually no later than 60 days after the end of each 6-month period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status is due [40 CFR §63.1335(e)(6)(i)].

(B) If none of the compliance exceptions specified in Paragraphs "c.iv.(4)(C)" through "c.iv.(4)(I)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit occurred during the 6-month period, the Periodic Report required by Paragraph "c.iv.(4)(A)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, shall be a statement that there were no compliance exceptions as described in this paragraph for the 6-month period covered by that report and no activities specified in Paragraphs "c.iv.(4)(C)" through "c.iv.(4)(I)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit occurred during the 6-month period covered by that report [40 CFR §63.1335(e)(6)(ii)].

(C) The Permittee complying with the provisions of Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.3, Table III.B of this Title V operating permit (40 CFR §§63.1314 through 63.1330) for any emission point or process section, Periodic Reports shall include [40 CFR §63.1335(e)(6)(iii)]:

(i) All information specified in Paragraph "a", Conditions B.6.1 and B.6.2(1) - B.6.2(3), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.122 for storage vessels); Paragraph "b", Condition B.6.3, Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.1327) for batch process vents and aggregate batch vent streams;

(ii) The daily average values or batch cycle daily average values of monitored parameters for both excused excursions, as defined

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in 40 CFR §63.1334(g), and unexcused excursions, as defined in Paragraph "b.vi", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.1334(f)). For excursions caused by lack of monitoring data, the start-time and duration of periods when monitoring data were not collected shall be specified.

(iii) The information in Paragraphs "c.iv.(4)(B)(iii)(*1*)" through "c.iv.(4)(B)(iii)(*2*)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit as applicable:

(*1*) Notification if a process change is made such that the group status of any emission point changes from Group 2 to Group 1. The Permittee is not required to submit a notification of a process change if that process change caused the group status of an emission point to change from Group 1 to Group 2. However, until the Permittee notifies the Administrator that the group status of an emission point has changed from Group 1 to Group 2, the Permittee is required to continue to comply with the Group 1 requirements for that emission point. This notification may be submitted at any time.

(*2*) Notification if one or more emission point(s) (other than equipment leaks) or one or more thermoplastic product process unit (TPPU) is added to an affected source. The Permittee shall submit the information contained in Paragraphs "c.iv.(4)(B)(iii)(*2*)(*a*)" through "c.iv.(4)(B)(iii)(*2*)(*b*)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit:

(*a*) A description of the addition to the affected source; and

(*b*) Notification of the group status of the additional emission point or all emission points in the TPPU.

(iv) The information in Paragraph "c.ii.(1)(B)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit for reports of start-up, shutdown, and malfunction.

(D) For each batch process vent with a batch mass input limitation, every second Periodic Report shall include the mass of HAP or material input to the batch unit operation during the 12-month period covered by the preceding and current Periodic Reports, and a statement of whether the batch process vent was in or out of compliance with the batch mass input limitation [40 CFR §63.1335(e)(6)(iv)].

(E) If any performance tests are reported in a Periodic Report, the following information shall be included [40 CFR §63.1335(e)(6)(v)]:

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

c. General Record Keeping and Reporting, Continued

(i) One complete test report shall be submitted for each test method used for a particular kind of emission point tested. A complete test report shall contain the information specified in Paragraph "c.iv.(4)(A)(ii)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(ii) For additional tests performed for the same kind of emission point using the same method, results and any other information, pertaining to the performance test, that is requested on a case-by-case basis by the Administrator shall be submitted, but a complete test report is not required.

(F) Notification of a change in the primary product of a TPPU, in accordance with the provisions in 40 CFR §63.1310(f). This includes a change in primary product from one thermoplastic product to either another thermoplastic product or to a non-thermoplastic product [40 CFR §63.1335(e)(6)(vi)].

(G) The results for each change made to a predominant use determination made under 40 CFR §63.1310(g) for a storage vessel that is assigned to an affected source subject to this subpart after the change [40 CFR §63.1335(e)(6)(vii)].

(H) The Periodic Report shall include the results for each change made to a predominant use determination made under 40 CFR §63.1310(h) for recovery operations equipment assigned to an affected source subject to this subpart after the change [40 CFR §63.1335(e)(6)(viii)].

(I) The Permittee if complying with Paragraph "c.vii.(1)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit shall notify the Administrator of the election to comply with Paragraph "c.vii.(1)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit as part of the Periodic Report or as part of the Notification of Compliance Status as specified in Paragraph "c.iv.(4)(K)" Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.1335(e)(6)(ix)].

(J) The Permittee if electing not to retain daily average or batch cycle daily average values under Paragraph "c.vii.(2)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit shall notify the Administrator as specified in Paragraph "c.vii.(2)(A)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.1335(e)(6)(x)].

(5) *Other reports.* Other reports shall be submitted as specified in Paragraphs "c.iv.(5)(A)" through "c.iv.(5)(C)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.1335(e)(7)].

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

c. General Record Keeping and Reporting, Continued

(A) For storage vessels, the notifications of inspections required by 40 CFR §63.1314 shall be submitted as specified in 40 CFR §§63.122(h)(1) and 63.122(h)(2).

(B) When the conditions of 40 CFR §§63.1310(f)(3)(iii), 63.1310(f)(9), or 63.1310(f)(10)(iii) are met, reports of changes to the primary product for a TPPU or process unit as required by 40 CFR §§63.1310(f)(3)(iii), 63.1310(f)(9), or 63.1310(f)(10)(iii)(C), respectively, shall be submitted.

(C) Owners or operators of TPPU or emission points (other than equipment leak components subject to 40 CFR §63.1331) that are subject to 40 CFR §63.1310(i)(1) or (i)(2) shall submit a report as specified in Paragraphs "c.iv.(5)(A)" and "c.iv.(5)(B)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(i) Reports shall include:

(*1*) A description of the process change or addition, as appropriate;

(*2*) The planned start-up date and the appropriate compliance date, according to 40 CFR §63.1310(i)(1) or (2); and

(*3*) Identification of the group status of emission points (except equipment leak components subject to 40 CFR §63.1331) specified in Paragraphs "c.iv.(5)(C)(i)(*3*)(*a*)" and "c.iv.(5)(C)(i)(*3*)(*b*)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, as applicable.

(*a*) All the emission points in the added TPPU as described in 40 CFR §63.1310(i)(1).

(*b*) All the emission points in an affected source designated as a new affected source under 40 CFR §63.1310(i)(2)(i).

(*c*) All the added or created emission points as described in 40 CFR §63.1310(i)(2)(ii) or (i)(2)(iii).

(*4*) If the Permittee wishes to request approval to use alternative monitoring parameters, alternative continuous monitoring or record keeping, alternative controls, engineering assessment to estimate emissions from a batch emissions episode, or wishes to establish parameter monitoring levels according to the procedures contained in 40 CFR §63.1334(c) or (d), a Pre-compliance Report shall be submitted in accordance with Paragraph "c.iv.(3), Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(ii) Reports shall be submitted as specified in Paragraphs "c.iv.(5)(C)(ii)(*1*)" through "c.iv.(5)(C)(ii)(*3*)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, as appropriate.

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

c. General Record Keeping and Reporting, Continued

(*1*) Owners or operators of an added TPPU subject to 40 CFR §63.1310(i)(1) shall submit a report no later than 180 days prior to the compliance date for the TPPU.

(*2*) Owners or operators of an affected source designated as a new affected source under 40 §63.1310(i)(2)(i) shall submit a report no later than 180 days prior to the compliance date for the affected source.

(*3*) Owners or operators of any emission point (other than equipment-leak components subject to 40 CFR §63.1331) subject to 40 CFR §63.1310(i)(2)(ii) or (i)(2)(iii) shall submit a report no later than 180 days prior to the compliance date for those emission points.

(6) *Operating permit application.* If the Permittee submits an operating permit application instead of a Pre-compliance Report, the Permittee shall include the following information with the operating permit application:

(A) The information specified in Paragraph "c.iv.(3)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, Pre-compliance Report, as applicable.

v. *Alternative monitoring parameters.* The Permittee who requests approval to monitor a different parameter than those specified in Conditions B.6.2(1) - B.6.2(3), Table III.B of this Title V operating permit (40 CFR §63.1314) for storage vessels, Condition B.6.3, Table III.B of this Title V operating permit (40 CFR §63.1321) for batch process vents and aggregate batch vent streams shall submit the information specified in Paragraphs "c.v.(1)" through "c.v.(3)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit in the Pre-compliance Report, as required by Paragraph "c.iv.(3)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. The Permittee shall retain for a period of 5 years each record required by Paragraphs "c.v.(1)" through "c.v.(3)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.1335(f)].

(1) The required information shall include a description of the parameter(s) to be monitored to ensure the recovery device, control device, or pollution prevention measure is operated in conformance with its design and achieves the specified emission limit, percent reduction, or nominal efficiency, and an explanation of the criteria used to select the parameter(s).

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

c. General Record Keeping and Reporting, Continued

(2) The required information shall include a description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation, the schedule for this demonstration, and a statement that the Permittee will establish a level for the monitored parameter as part of the Notification of Compliance Status report required in Paragraph "c.iv.(5)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, unless this information has already been included in the operating permit application.

(3) The required information shall include a description of the proposed monitoring, record keeping, and reporting system, to include the frequency and content of monitoring, record keeping, and reporting. Further, the rationale for the proposed monitoring, record keeping, and reporting system shall be included if either condition in Paragraph "c.v.(3)(A)" or "c.v.(3)(B)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit is met:

(A) If monitoring and record keeping is not continuous; or

(B) If reports of daily average values will not be included in Periodic Reports when the monitored parameter value is above the maximum level or below the minimum level as established in the operating permit or the Notification of Compliance Status.

vi. *Alternative continuous monitoring and record keeping.* The Permittee choosing not to implement the provisions listed in Condition B.6.3, Table III.B of this Title V operating permit (40 CFR §63.1321) for batch process vents and aggregate batch vent streams may instead request approval to use alternative continuous monitoring and record keeping provisions according to the procedures specified in Paragraphs "c.vi.(1)" through "c.vi.(4)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. Requests shall be submitted in the Pre-compliance Report as specified in Paragraph "c.iv.(3)(D)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, if not already included in the operating permit application, and shall contain the information specified in Paragraphs "c.vi.(2)(B)" and "c.vi.(3)(B)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, as applicable [40 CFR §63.1335(g)].

(1) The provisions in 40 CFR §63.8(f)(5)(i) shall govern the review and approval of requests.

(2) If the Permittee does not have an automated monitoring and recording system capable of measuring parameter values at least once every 15 minutes and that does not generate continuous records may request approval to use a non-automated system with less frequent monitoring, in accordance with Paragraphs "c.vi.(2)(A)" and "c.vi.(2)(B)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

c. General Record Keeping and Reporting, Continued

(A) The requested system shall include manual reading and recording of the value of the relevant operating parameter no less frequently than once per hour. Daily average (or batch cycle daily average) values shall be calculated from these hourly values and recorded.

(B) The request shall contain:

(i) A description of the planned monitoring and record keeping system;

(ii) Documentation that the affected source does not have an automated monitoring and recording system;

(iii) Justification for requesting an alternative monitoring and record keeping system; and

(iv) Demonstration to the Administrator's satisfaction that the proposed monitoring frequency is sufficient to represent control or recovery device operating conditions, considering typical variability of the specific process and control or recovery device operating parameter being monitored.

(3) The Permittee may request approval to use an automated data compression recording system that does not record monitored operating parameter values at a set frequency, but records all values that meet set criteria for variation from previously recorded values, in accordance with Paragraphs "c.vi.(3)(A)" and "c.vi.(3)(B)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(A) The requested system shall be designed to:

(i) Measure the operating parameter value at least once during every 15-minute period;

(ii) Except for the monitoring of batch process vents, calculate hourly average values each hour during periods of operation;

(iii) Record the date and time when monitors are turned off or on;

(iv) Recognize unchanging data that may indicate the monitor is not functioning properly, alert the operator, and record the incident;

(v) Calculate daily average (or batch cycle daily average) values of the monitored operating parameter based on all measured data; and

(vi) If the daily average is not an excursion, as defined in Paragraph "b.v", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.1334(f)), the data for that operating day may be converted to hourly average values and the four or more individual records for each hour in the operating day may be discarded.

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

c. General Record Keeping and Reporting, Continued

(B) The request shall contain:

(i) A description of the monitoring system and data compression recording system, including the criteria used to determine which monitored values are recorded and retained;

(ii) The method for calculating daily averages and batch cycle daily averages; and

(iii) A demonstration that the system meets all criteria in Paragraph "c.vi.(3)(A)" above, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(4) The Permittee may request approval to use other alternative monitoring systems according to the procedures specified in 40 CFR §63.8(f)(4).

vii. *Reduced record keeping program.* For any parameter with respect to any item of equipment, the Permittee may implement the record keeping requirements specified in Paragraph "c.vii.(1)" or "c.vii.(2)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit as alternatives to the continuous operating parameter monitoring and record keeping provisions that would otherwise apply under this subpart. The Permittee shall retain for a period of 5 years each record required by Paragraph "c.vii.(1)" or "c.vii.(2)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, except as otherwise provided in Paragraph "c.vii.(1)(F)(iv)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit [40 CFR §63.1335(h)].

(1) The Permittee may retain only the daily average (or batch cycle daily average) value, and is not required to retain more frequent monitored operating parameter values, for a monitored parameter with respect to an item of equipment, if the requirements of Paragraphs "c.vii.(1)(A)" through "c.vii.(1)(F)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit are met. The Permittee if electing to comply with the requirements of Paragraph "c.vii.(1)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit shall notify the Administrator in the Notification of Compliance Status as specified in Paragraph "c.iv.(4)(G)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, if the Notification of Compliance Status has already been submitted, in the Periodic Report immediately preceding implementation of the requirements of Paragraph "c.vii.(1)" as specified in Paragraph "c.iv.(5)(I)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

c. General Record Keeping and Reporting, Continued

(A) The monitoring system is capable of detecting unrealistic or impossible data during periods of operation other than start-ups, shutdowns, or malfunctions (e.g., a temperature reading of −200 °C on a boiler), and will alert the Permittee by alarm or other means. The Permittee shall record the occurrence. All instances of the alarm or other alert in an operating day constitute a single occurrence.

(B) The monitoring system generates, updated at least hourly throughout each operating day, a running average of the monitoring values that have been obtained during that operating day, and the capability to observe this running average is readily available to the Administrator on-site during the operating day. The Permittee shall record the occurrence of any period meeting the criteria in Paragraphs "c.vii.(1)(B)(i)" through "c.vii.(1)(B)(iii)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3,and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. All instances in an operating day constitute a single occurrence.

(i) The running average is above the maximum or below the minimum established limits;

(ii) The running average is based on at least six one-hour average values; and

(iii) The running average reflects a period of operation other than a start-up, shutdown, or malfunction.

(C) The monitoring system is capable of detecting unchanging data during periods of operation other than start-ups, shutdowns, or malfunctions, except in circumstances where the presence of unchanging data is the expected operating condition based on past experience (e.g., pH in some scrubbers), and will alert the operator by alarm or other means. The Permittee shall record the occurrence. All instances of the alarm or other alert in an operating day constitute a single occurrence.

(D) The monitoring system will alert the Permittee by an alarm or other means, if the running average parameter value calculated under Paragraph "c.vii.(1)(B)" above, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit reaches a set point that is appropriately related to the established limit for the parameter that is being monitored.

(E) The Permittee shall verify the proper functioning of the monitoring system, including its ability to comply with the requirements of Paragraph "c.vii.(1)", at the times specified in Paragraphs "c.vii.(1)(E)(i)" through "c.vii.(1)(E)(iii)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. The Permittee shall document that the required verifications occurred.

(i) Upon initial installation.

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

c. General Record Keeping and Reporting, Continued

(ii) Annually after initial installation.

(iii) After any change to the programming or equipment constituting the monitoring system, which might reasonably be expected to alter the monitoring system's ability to comply with the requirements of this section.

(F) The Permittee shall retain the records identified in Paragraphs "c.vii.(1)(F)(i)" through "c.vii.(1)(F)(iv)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(i) Identification of each parameter, for each item of equipment, for which the Permittee has elected to comply with the requirements of Paragraph "c.vii", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(ii) A description of the applicable monitoring system(s), and of how compliance will be achieved with each requirement of Paragraphs "c.vii.(1)(A)" through "c.vii.(1)(E)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. The description shall identify the location and format (e.g., on-line storage, log entries) for each required record. If the description changes, the Permittee shall retain both the current and the most recent superseded description, as provided in Paragraph "c.i", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit except as provided in Paragraph "c.vii.(1)(F)(iv)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(iii) A description, and the date, of any change to the monitoring system that would reasonably be expected to impair its ability to comply with the requirements of Paragraph "c.vii.(1)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(iv) The Permittee if subject to Paragraph "c.vii.(1)(F)(ii)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit shall retain the current description of the monitoring system as long as the description is current. The current description shall, at all times, be retained on-site or be accessible from a central location by computer or other means that provides access within 2 hours after a request. The Permittee shall retain all superseded descriptions for at least 5 years after the date of their creation. Superseded descriptions shall be retained on-site (or accessible from a central location by computer or other means that provides access within 2 hours after a request) for at least 6 months after their creation. Thereafter, superseded descriptions may be stored off-site.

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

c. General Record Keeping and Reporting, Continued

(2) If the Permittee has elected to implement the requirements of Paragraph "c.vii.(1)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit for a monitored parameter with respect to an item of equipment and a period of 6-consecutive months has passed without an excursion as defined in Paragraph "c.vii.(2)(D)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit the Permittee is no longer required to record the daily average (or batch cycle daily average) value for any operating day when the daily average (or batch cycle daily average) value is less than the maximum or greater than the minimum established limit. With approval by the Administrator, monitoring data generated prior to the compliance date of Subpart JJJ shall be credited toward the period of 6 consecutive months, if the parameter limit and the monitoring accomplished during the period prior to the compliance date was required and/or approved by the Administrator [40 CFR §63.1335(h)(2)].

(A) If the Permittee elects not to retain the daily average (or batch cycle daily average) values, the Permittee shall notify the Administrator in the next Periodic Report as specified in Paragraph "c.iv.(4)(F)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. The notification shall identify the parameter and unit of equipment.

(B) If, on any operating day after the Permittee has ceased recording daily average (or batch cycle daily average) values as provided in Paragraph "c.vii.(2)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit there is an excursion as defined in Paragraph "c.vii.(2)(D)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, the Permittee shall immediately resume retaining the daily average (or batch cycle daily average) value for each operating day and shall notify the Administrator in the next Periodic Report. The Permittee shall continue to retain each daily average (or batch cycle daily average) value until another period of 6 consecutive months has passed without an excursion as defined in Paragraph "c.vii.(2)(D)" below, Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(C) The Permittee shall retain the records specified in Paragraphs "c.vii.(1)(A)" through "c.vii.(1)(C)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit for the duration specified in Paragraph "c.vii", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit. For any calendar week, if compliance with Paragraphs "c.vii.(1)(A)" through "c.vii.(1)(D)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration,

B. GEU-001 - STYRON® PLANT & MAGNUM® PLANT: EU-001A - EU-001MM VENTED TO DOWTHERM HEATER "A" GEU-002 - STYRON® PLANT: EU-002A - EU-002C VENTED TO ATMOSPHERE; EU-002D - EU-002E VENTED TO STYRON® DEMISTER GEU-003 - MAGNUM® PLANT: EU-003A VENTED TO ATMOSPHERE; EU-003B - EU-003C VENTED TO MAGNUM® DEMISTER

- **COMPLIANCE DEMONSTRATION**

B.6.1, B.6.2(1) - B.6.2(3), B.6.3, B.6.4(1) - B.6.4(15). 40 CFR Part 63, Subpart JJJ

c. General Record Keeping and Reporting, Continued

Section III.B of this Title V operating permit, does not result in retention of a record of at least one occurrence or measured parameter value, the Permittee shall record and retain at least one parameter value during a period of operation other than a start-up, shutdown, or malfunction.

(D) For purposes of Paragraph "c.vii", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit, an excursion means that the daily average (or batch cycle daily average) value of monitoring data for a parameter is greater than the maximum, or less than the minimum established value, except as provided in Paragraphs "c.vii.(2)(D)(i)" and "c.vii.(2)(D)(ii)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

(i) The daily average (or batch cycle daily average) value during any start-up, shutdown, or malfunction shall not be considered an excursion for purposes of Paragraph "c.vii.(2)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit if the Permittee follows the applicable provisions of the start-up, shutdown, and malfunction plan required by 40 CFR §63.6(e)(3).

(ii) An excused excursion, as described in Paragraph "b.vi", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.1334(g)), shall not be considered an excursion for purposes of Paragraph "c.vii.(2)", Conditions B.6.1, B.6.2(1) - B.6.2(3), B.6.3, and B.6.4(1) - B.6.4(15), Compliance Demonstration, Section III.B of this Title V operating permit.

C. EU-004 - DOWTHERM HEATER "B"

- **APPLICABLE REQUIREMENTS**

TABLE III.C: APPLICABLE REQUIREMENTS EU-004

Pollutant or Process Parameter	Limitation or Restriction	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F/S
NO_X	When burning **natural gas or No. 2 fuel oil**, less than or equal to: ▪ 0.200 lb/MMBTU, 1.80 lb/hour ▪ 7.88 TPY	Permit No. 092-0007	C.1	F
	Total Annual Emissions for both fuels shall not exceed 7.88 TPY			
SO_X & Sulfur Content	When burning **natural gas**, less than or equal to: ▪ 0.001 lb/MMBTU, 0.005 lb/hour ▪ 0.02 TPY		C.2	
	When burning **No. 2 fuel oil**, less than or equal to: ▪ 0.214 lb/MMBTU, 1.926 lb/hour ▪ 8.44 TPY			
	Total Annual Emissions for both fuels shall not exceed 8.44 TPY			
	Less than or equal to 0.20% sulfur by weight (dry basis) in No. 2 fuel oil			
CO	When burning **natural gas**, less than or equal to: ▪ 0.021 lb/MMBTU, 0.189 lb/hour ▪ 0.83 TPY		C.3	
	When burning **No. 2 fuel oil**, less than or equal to: ▪ 0.037 lb/MMBTU, 0.333 lb/hour ▪ 1.46 TPY			
	Total Annual Emissions for both fuels shall not exceed 1.46 TPY			
VOC	When burning **natural gas**, less than or equal to: ▪ 0.004 lb/MMBTU, 0.036 lb/hour ▪ 0.16 TPY		C.4	
	When burning **No. 2 fuel oil**, less than or equal to: ▪ 0.003 lb/MMBTU, 0.027 lb/hour ▪ 0.12 TPY			
	Total Annual Emissions for both fuels shall not exceed 0.16 TPY			

B. EU-004 - DOWTHERM HEATER "B"

- **APPLICABLE REQUIREMENTS**

TABLE III.C: APPLICABLE REQUIREMENTS EU-004

Pollutant or Process Parameter	Limitation or Restriction	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F/S
PM_{10}	When burning **natural gas** or **No. 2 fuel oil**, less than or equal to: ▪ 0.012 lb/MMBTU, 0.108 lb/hour ▪ 0.47 TPY	Permit No. 092-0007	C.5	F
	Total Annual Emissions for both fuels shall not exceed 0.47 TPY			
TSP	When burning **natural gas**, less than or equal to: ▪ 0.012 lb/MMBTU, 0.108 lb/hour ▪ 0.47 TPY			
	When burning **No. 2 fuel oil**, less than or equal to: ▪ 0.015 lb/MMBTU, 0.135 lb/hour ▪ 0.59 TPY			
	Total Annual Emissions for both fuels shall not exceed 0.59 TPY			
Fuel Firing Rate (Hourly)	Maximum fuel firing rate less than or equal to 9,000 ft^3/hour when firing **natural gas**.		C.6	
	Maximum fuel firing rate less than or equal to 67 gallons/hour when firing **No. 2 fuel oil**.			
Maximum Fuel Consumption (Annual)	Maximum fuel consumption over any consecutive 12 month period less than or equal to 78,800,000 ft^3 when firing **natural gas**.			
	Maximum fuel consumption over any consecutive 12 month period less than or equal to 587,000 gallons when firing **No. 2 fuel oil**.			

C. EU-004 - DOWTHERM HEATER "B"

- **APPLICABLE REQUIREMENTS**

TABLE III.C: APPLICABLE REQUIREMENTS EU-004

Pollutant or Process Parameter	Limitation or Restriction		Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F/S
HAP (State)	**Component (No. 2 Fuel Oil):**	Allowable stack concentration (ASC) shall not exceed (µg/m^3) when burning **No. 2 fuel oil:**	Permit No. 092-0007	C.7	F
	Formaldehyde	64.76			
	Arsenic	1.95			
	Beryllium	0.06			
	Chromium	3.69			
	Nickel	67.56			
	Cadmium	7.65			
	Sulfuric Acid	2,943.70			
	Copper	9.71			
	Lead	0.91			
	Mercury	21.93			
	(Natural Gas)	Maximum stack concentration shall not exceed (µg/m^3) when burning **natural gas:**			
	Formaldehyde	162.64			
HAP (Federal)	The Permittee is subject to 40 CFR Part 63, Subpart DDDDD "*NESHAP for Industrial Boilers, Institutional/Commercial Boilers, and Process Heaters*" as a "*small liquid fuel subcategory*" source that is subsequently exempt at this time from the requirements to submit an initial notification and from the requirement to meet emissions limitation or work practice standards set forth in 40 CFR Part 63, Subpart DDDDD and 40 CFR Part 63, Subpart A.		40 CFR Part 63, Subpart DDDDD 40 CFR §§63.7575 & 63.7506(c)	C.8	F

Section III: Applicable Requirements and Compliance Demonstration

C. EU-004 - DOWTHERM HEATER "B"

- **COMPLIANCE DEMONSTRATION**

C.1. **NO_X**: Emissions of NO_X shall not exceed those limits stated in Condition C.1, Table III.C of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

C.1.a. **Monitoring and Testing Requirements**

i. The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from Permit No. 092-0007 ("Compilation of Air Pollutant Emission Factors", AP-42, US EPA) and the hourly fuel firing rate and the annual fuel consumption rate [Permit No. 092-0007].

ii. The Permittee shall maintain good operational practices by following the manufacturers instructions for Dowtherm Heater "B" [RCSA §§22a-174-33(j)(1)(K) & 40 CFR 70.6(a)(3)(i)].

iii. If required by the Commissioner, the Permittee shall measure emissions using the average of three one-hour tests, each performed over a consecutive 60-minute period. The emissions testing method for NO_X shall be performed in accordance with Method 7, 40 CFR Part 60 [RCSA §22a-174-5(b)(7)].

C.1.b. **Record Keeping Requirements**

i. The Permittee shall maintain monthly and annual records of actual NO_X emissions. Annual NO_X emissions shall be calculated each calendar month by adding the current calendar month's emissions to those of the previous eleven (11) months [RCSA §22a-174-4(c)(1)].

ii. The Permittee shall maintain records of all tune-ups, repairs, replacement of parts and other maintenance performed [RCSA §22a-174-(4)(c)(1)].

iii. The Permittee shall maintain records of the dates, times, and places of all emissions testing, the persons performing the measurements, the test methods used, the operating conditions at time of testing, and the results of such testing [RCSA §22a-174-4(c)(1)].

C.2. **SO_X**: Emissions of SO_X and the fuel sulfur content shall not exceed those limits stated in Condition C.2, Table III.C of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

C.2.a. **Monitoring and Testing Requirements**

i. The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from Permit No. 092-0007 ("*Compilation of Air Pollutant Emission Factors*", AP-42, US EPA) and the hourly fuel firing rate and the annual fuel consumption rate [Permit No. 092-0007].

ii. The Permittee shall verify compliance with the fuel sulfur content limitation by monitoring fuel merchant certifications from the fuel supplier certifying the type of fuel, the weight percent of sulfur (dry basis) in the fuel, name of fuel supplier, and the method used to determine the sulfur content of fuel for each shipment of liquid fuel [RCSA §§22a-174-4(c)(1) & 22a-174-19(a)(5)].

C.2.b. **Record Keeping Requirements**

i. The Permittee shall maintain monthly and annual records of actual SO_X emissions. Annual SO_X emissions shall be calculated each calendar month by adding the current calendar month's emissions to those of the previous eleven (11) months [RCSA §22a-174-4(c)(1)].

ii. The Permittee shall maintain records of fuel merchant certifications from the fuel supplier certifying the type of fuel, the weight percent of sulfur (dry basis) in the fuel, name of fuel supplier, and the method used to determine the sulfur content of fuel for each shipment of liquid fuel [RCSA §§22a-174-4(c)(1) & 22a-174-19(a)(5)].

Section III: Applicable Requirements and Compliance Demonstration

C. EU-004 - DOWTHERM HEATER "B"

- **COMPLIANCE DEMONSTRATION**

C.3. CO: Emissions of CO shall not exceed those limits stated in Condition C.3, Table III.C of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

C.3.a. Monitoring and Testing Requirements

i. The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from Permit No. 092-0007 ("*Compilation of Air Pollutant Emission Factors*", AP-42, US EPA) and the hourly fuel firing rate and the annual fuel consumption rate [Permit No. 092-0007].

ii. The Permittee shall maintain good operational practices by following the manufacturers instructions for the Dowtherm Heater "B" [RCSA §§22a-174-33(j)(1)(K) & 40 CFR 70.6(a)(3)(i)].

C.3.b. Record Keeping Requirements

The Permittee shall maintain monthly and annual records of actual CO emissions. Annual CO emissions shall be calculated each calendar month by adding the current calendar month's emissions to those of the previous eleven (11) months [RCSA §22a-174-4(c)(1)].

C.4. VOC: Emissions of VOC shall not exceed those limits stated in Condition C.4, Table III.C of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

C.4.a. Monitoring and Testing Requirements

i. The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from Permit No. 092-0007 ("*Compilation of Air Pollutant Emission Factors*", AP-42, US EPA) and the hourly fuel firing rate and the annual fuel consumption rate [Permit No. 092-0007].

ii. The Permittee shall maintain good operational practices by following the manufacturers instructions for the Dowtherm Heater "B" [RCSA §§22a-174-33(j)(1)(K) & 40 CFR 70.6(a)(3)(i)].

C.4.b. Record Keeping Requirements

The Permittee shall maintain monthly and annual records of actual VOC emissions. Annual VOC emissions shall be calculated each calendar month by adding the current calendar month's emissions to those of the previous eleven (11) months [RCSA §22a-174-4(c)(1)].

C.5. TSP/PM_{10}: Emissions of TSP and PM_{10} shall not exceed those limits stated in Condition C.5, Table III.C of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

C.5.a. Monitoring and Testing Requirements

The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from Permit No. 092-0007 ("*Compilation of Air Pollutant Emission Factors*", AP-42, US EPA) and the hourly fuel firing rate [Permit No. 092-0007].

C.5.b. Record Keeping Requirements

The Permittee shall maintain monthly and annual records of actual TSP/PM_{10} emissions. Annual TSP/PM_{10} emissions shall be calculated each calendar month by adding the current calendar month's emissions to those of the previous eleven (11) months [RCSA §22a-174-4(c)(1)].

C.6. Fuel Firing Rate (Hourly)/Fuel Consumption Rate (Annual): The fuel firing rate and fuel consumption rate shall not exceed those limits stated in Condition C.6, Table III.C of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

C. EU-004 - DOWTHERM HEATER "B"

- **COMPLIANCE DEMONSTRATION**

C.6.a. **Monitoring and Testing Requirements**

i. The Permittee shall monitor or mechanically limit the hourly fuel consumption rate [Permit No. 092-0007].

ii. The Permittee shall monitor monthly and annual amounts of each fuel consumed. If more than one fuel tank services the Dowtherm Heater "B", the Permittee shall use a fuel-metering device to continuously monitor fuel consumption. The Permittee shall monitor monthly meter readings for natural gas usage. The Permittee shall determine annual fuel consumption by adding (for each fuel) the current month's fuel usage to that of the previous eleven (11) months. The Permittee shall make these calculations on a monthly basis [Permit No. 092-0007].

C.6.b. **Record Keeping Requirements**

The Permittee shall maintain records of monitored data required above in Paragraph "a", Condition C.6, "*Monitoring and Testing Requirements,*" Section III.C of this Title V operating permit [Permit No. 092-0007].

C.7 **State HAP**: HAP emissions shall not exceed those limits stated in Condition C.7, Table III.C of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

C.7.a. **Monitoring and Testing Requirements**

i. The Permittee shall ensure that each HAP in Condition C.7, Table III.C of this Title V operating permit shall not exceed its respective allowable stack concentration (ASC). The ASC shall be calculated using the emissions factors obtained from Permit No. 092-0007 (stack test data); the hourly fuel firing rate; and the minimum exhaust gas flow rate at maximum rated capacity: 3,265 acfm [Permit No. 092-0007].

ii. The Permittee shall monitor operating parameters of the Dowtherm Heater "B" and maintain operation in accordance with applicable manufacturer instructions [RCSA §22a-174-29(b)].

iii. The Permittee may be required to conduct testing to determine concentration of HAPs should the Commissioner determine that operation of Dowtherm Heater "B" might reasonably be expected to cause an exceedance of an applicable Hazard Limiting Value (HLV) or Ambient Air Quality Standard [RCSA §22a-174-29(e)(1)].

C.7.b. **Record Keeping Requirements**

The Permittee shall maintain records of monitored data required above in Paragraph "a", Condition C.7, "*Monitoring and Testing Requirements,*" Section III.C of this Title V operating permit [Permit No. 092-0007].

D. EU-005 - EMERGENCY ENGINE

- **APPLICABLE REQUIREMENTS**

TABLE III.D: APPLICABLE REQUIREMENTS EU-005

Pollutant or Process Parameter	Limitations or Restrictions	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F / S
NO_X	Less than or equal to: - 2.80 lb/MMBTU - 48.94 lb/hour, 4.17 TPY	Permit No. 092-0019	D.1	F
SO_X & Sulfur Content	Less than or equal to: - 0.20 lb/MMBTU - 3.41 lb/hour, 0.29 TPY		D.2	
	Less than or equal to 0.20 % sulfur by weight (dry basis) in diesel fuel.			
CO	Less than or equal to: - 1.88 lb/MMBTU - 32.85 lb/hour, 2.80 TPY		D.3	
TSP	Less than or equal to: - 0.08 lb/MMBTU - 1.33 lb/hour, 0.11 TPY		D.4	
PM_{10}	Less than or equal to: - 0.05 lb/MMBTU - 0.87 lb/hour, 0.07 TPY			
VOC	Less than or equal to: - 0.13 lb/MMBTU - 2.25 lb/hour, 1.96 TPY		D.5	
Maximum Fuel Firing Rate/ Maximum Fuel Consumption Rate	Less than or equal to: - 121 gallon/hour - 20,600 gallon/year		D.6	
Sulfuric Acid	Actual Stack Concentration (ASC) shall be less than or equal to 1,163.90 $\mu g/m^3$		D.7	
Special Requirements	EU-005 shall be dedicated solely to responding in emergency situations. Such situations are defined as follows: (1) A complete failure of commercial power; (2) A low voltage condition below equipment operating tolerances (brownout); (3) Voluntary shutdown of commercial power to repair malfunctioning equipment while emergency engine supply power to remaining equipment; and (4) Operation for maintenance.		D.8	
HAP (Federal)	The Permittee is subject to 40 CFR Part 63, Subpart ZZZZ "*NESHAP for Stationary Reciprocating Internal Combustion Engines*" that as an emergency engine is exempt from the requirement to submit an initial notification in accordance with 40 CFR §63.9(b) and also exempt from the requirement to meet emissions limitation or work practice standards set forth in 40 CFR Part 63, Subpart ZZZZ and 40 CFR Part 63, Subpart A.	40 CFR Part 63, Subpart ZZZZ 40 CFR §63.6590(b)(3)	D.9	F

D. EU-005 - EMERGENCY ENGINE

▪ COMPLIANCE DEMONSTRATION

D.1. **NO_X**: Emissions of NO_X shall not exceed those limits stated in Condition D.1, Table III.D of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

D.1.a. **Monitoring and Testing Requirements**

The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from manufacturers data and the hourly fuel firing rate and the annual fuel consumption rate [Permit No. 092-0019].

D.1.b. **Record Keeping Requirements**

The Permittee shall maintain monthly and annual records of actual NO_X emissions. Annual NO_X emissions shall be calculated each calendar month by adding the current calendar month's emissions to those of the previous eleven (11) months [RCSA §22a-174-4(c)(1)].

D.2. **SO_X**: Emissions of SO_X and the fuel sulfur content shall not exceed those limits stated in Condition D.2, Table III.D of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

D.2.a. **Monitoring and Testing Requirements**

i. The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from manufacturers data and the hourly fuel firing rate [Permit No. 092-0019].
ii. The Permittee shall verify compliance with the fuel sulfur content limitation by monitoring fuel merchant certifications from the fuel supplier certifying the type of fuel, the weight percent of sulfur (dry basis) in the fuel, name of fuel supplier, and the method used to determine the sulfur content of fuel for each shipment of liquid fuel [RCSA §§22a-174-4(c)(1) & 22a-174-19(a)(5)].

D.2.b. **Record Keeping Requirements**

i. The Permittee shall maintain monthly and annual records of actual SO_X emissions. Annual SO_X emissions shall be calculated each calendar month by adding the current calendar month's emissions to those of the previous eleven (11) months [RCSA §22a-174-4(c)(1)].
ii. The Permittee shall maintain records of fuel merchant certifications from the fuel supplier certifying the type of fuel, the weight percent of sulfur (dry basis) in the fuel, name of fuel supplier, and the method used to determine the sulfur content of fuel for each shipment of liquid fuel [RCSA §§22a-174-4(c)(1) & 22a-174-19(a)(5)].

D.3. **CO**: Emissions of CO shall not exceed those limits stated in Condition D.3, Table III.D of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

D.3.a. **Monitoring and Testing Requirements**

The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from manufacturers data and the hourly fuel firing rate and the annual fuel consumption rate [Permit No. 092-0019].

D.3.b. **Record Keeping Requirements**

The Permittee shall maintain monthly and annual records of actual CO emissions. Annual CO emissions shall be calculated each calendar month by adding the current calendar month's emissions to those of the previous eleven (11) months [RCSA §22a-174-4(c)(1)].

C. EU-005 - EMERGENCY ENGINE

▪ COMPLIANCE DEMONSTRATION

D.4. TSP/PM_{10}: Emissions of TSP and PM_{10} shall not exceed those limits stated in Condition D.4, Table III.D of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to the following requirements:

D.4.a. Monitoring and Testing Requirements

The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from manufacturers data and the hourly fuel firing rate [Permit No. 092-0019].

D.4.b. Record Keeping Requirements

The Permittee shall maintain monthly and annual records of actual TSP/PM_{10} emissions. Annual TSP/PM_{10} emissions shall be calculated each calendar month by adding the current calendar month's emissions to those of the previous eleven (11) months [RCSA §22a-174-4(c)(1)].

D.5. VOC: Emissions of VOC shall not exceed those limits stated in Condition D.5, Table III.D of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to the following requirements:

D.5.a. Monitoring and Testing Requirements

The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from manufacturers data and the hourly fuel firing rate and the annual fuel consumption rate [Permit No. 092-0019].

D.5.b. Record Keeping Requirements

The Permittee shall maintain monthly and annual records of actual VOC emissions. Annual VOC emissions shall be calculated each calendar month by adding the current calendar month's emissions to those of the previous eleven (11) months [RCSA §22a-174-4(c)(1)].

D.6. Maximum Fuel Firing Rate/Maximum Fuel Consumption Rate: The fuel firing rate and fuel consumption rate shall not exceed those limits stated in Condition D.6, Table III.D of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

D.6.a. Monitoring and Testing Requirements

i. The Permittee shall monitor or mechanically limit the hourly fuel consumption rate [Permit No. 092-0019].

ii. The Permittee shall monitor monthly and annual amounts of each fuel consumed. If more than one fuel tank services the emergency engine, the Permittee shall use a fuel-metering device to continuously monitor fuel consumption. The Permittee shall determine annual fuel consumption by adding the current month's fuel usage to that of the previous eleven (11) months. The Permittee shall make these calculations on a monthly basis [Permit No. 092-0019].

D.6.b. Record Keeping Requirements

The Permittee shall maintain records of monitored data required above in Paragraph "a", Condition D.6, "*Monitoring and Testing Requirements,*" Section III.D of this Title V operating permit [Permit No. 092-0019].

D.7 Sulfuric Acid: Emissions of Sulfuric Acid shall not exceed the limit in Condition D.7, Table III.D of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

D. EU-005 - EMERGENCY ENGINE

- **COMPLIANCE DEMONSTRATION**

D.7.a. **Monitoring and Testing Requirements**

i. The ASC shall be calculated using the appropriate emissions factors (obtained from Permit No. 092-0019); the hourly fuel firing rate; and the minimum exhaust gas flow rate at maximum rated capacity [Permit No. 092-0019].

ii. The Permittee shall meet the requirements in Paragraph "a.ii", Condition D.2, Section III.D of this Title V operating permit.

D.7.b. **Record Keeping Requirements**

The Permittee shall maintain records of monitored data required above in Paragraph "a", Condition D.7, "*Monitoring and Testing Requirements,*" Section III.D of this Title V operating permit [Permit No. 092-0019].

D.8 **Special Requirements**: EU-005 shall be operated under the restrictions in Condition D.8, Table III.D of this Title V operating permit. Demonstration of compliance shall be based on the following requirements:

D.8.a. **Monitoring and Testing Requirements**

The Permittee shall monitor and determine the date, duration, and type of emergency during which the emergency engine is operated [Permit No. 092-0019].

D.8.b. **Record Keeping Requirements**

The Permittee shall maintain records of monitored data required above in Paragraph "a", Condition D.8, "*Monitoring and Testing Requirements,*" Section III.D of this Title V operating permit [Permit No. 092-0019].

General Requirements

i. The Permittee shall have the emergency engine maintained on a yearly basis in order to ensure efficient operating performance and minimal air emissions. Best efforts shall be made in this yearly tune-up to keep the engine operating under conditions as near as possible to the manufacturers emissions data [Permit No. 092-0019].

ii. The Permittee shall maintain records of all tune-ups, repairs, replacement of parts and other maintenance performed [RCSA §22a-174-(4)(c)(1)].

E. EU-006, EU-007, EU-008 - Acrylonitrile and Styrene Storage Tanks EU-016BB - Latex Butadiene Storage Sphere

- **Applicable Requirements**

Table III.E: Applicable Requirements EU-006 - EU-008 & EU-016BB

Pollutants or Process Parameters	Emissions Unit No.	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number	F / S
VOC	EU-006 Acrylonitrile Storage Tank EU-016BB Latex Butadiene Storage Sphere	(1) All VOC stationary storage tanks, reservoirs, or containers of more than 10,000-gallon capacity but less than 40,000-gallon capacity, containing any VOC with a vapor pressure of 1.5 pounds per square inch absolute (PSIA) or greater at operating temperatures, are required to have operations conservation vent valves. All tank vent control systems shall be maintained in such a condition as designed to prevent and minimize emissions in accordance with good engineering practices as specified by the ASME Vessel Design Codes. (2) All changes in pressure and vacuum settings for any of the tank vent control systems specified above shall be submitted and approved by the Commissioner prior to implementing such changes.	Order No. 8011	E.1	F
		For all stationary storage tanks greater than 40,000-gallon capacity, compliance shall be demonstrated for all subject equipment pursuant to RCSA §22a-174-20(a)(2): (1) No person shall place, store or hold in any stationary tank, reservoir or other container of more than 40,000-gallons capacity any VOC with a vapor pressure of 1.5 PSIA or greater under actual storage conditions unless the tank, reservoir or other container is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor or gas loss to the atmosphere or is designed, and equipped, with one of the vapor loss control devices listed in Subparagraphs (1)(i) – (1)(iv), below, Condition E.2, Table III.E of this Title V operating permit. If the control devices specified in Subparagraphs (1)(i) or (1)(iv) are used to comply with the requirements of this Condition, then the requirements of RCSA §22a-174-20(a)(8) shall also be met. (i) A fixed roof and a floating roof, constituting of a pontoon type, double deck type roof or internal floating cover, which will rest on the surface of the liquid contents and be equipped with a closure seal or seals to close the space between the roof edge and tank wall. This control equipment is not permitted if the VOC has a vapor pressure of 11.0 PSIA or greater under actual storage conditions. All tank gauging or sampling devices must be gas-tight except when tank gauging or sampling is taking place. (ii) A vapor recovery system which collects all VOC vapors and gases discharged from the tank and a vapor return or disposal system which is designed to process such vapors so as to reduce their emissions to the atmosphere by at least 95% by weight. (iii) Other equipment or means with an efficiency equal to that required under Subparagraph (1)(ii), Condition E.2, Table III.E of this Title V operating permit for purposes of air pollution control as may be approved by the Commissioner by permit or order.	Order No. 8011 & RCSA §22a-174-20(a)(2)	E.2	F

E. EU-006, EU-007, EU-008 - Acrylonitrile and Styrene Storage Tanks EU-016BB - Latex Butadiene Storage Sphere

- **Applicable Requirements**

Table III.E: Applicable Requirements EU-006 - EU-008 & EU-016BB

Pollutants or Process Parameters	Emissions Unit No.	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number	F / S
VOC	EU-006 Acrylonitrile Storage Tank EU-016BB Latex Butadiene Storage Sphere	(iv) On or after June1, 1985 a floating roof, consisting of a pontoon type, double deck type roof or external floating cover, which will rest on the surface of the liquid contents and be equipped with primary and secondary closure seals to close the space between the roof edge and the tank wall. This control equipment is not permitted if the VOC has a vapor pressure of 11 PSIA, or greater under actual storage conditions. All tank gauging or sampling devices must be gas-tight except when tank gauging or sampling is taking place. The Permittee subject to this provisions of this Paragraph (1)(iv), Condition E.2, Table III.E shall ensure that: (A) Any seal is intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall; (B) The total area of gaps, determined in accordance with the requirements of Paragraph (a)(9), RCSA §22a-174-20, exceeding 0.125 inches in width between the secondary closure seal and the tank wall does not exceed 1.0 square inch per foot of tank diameter; (C) A secondary closure seal gap measurement as specified in (B) above is made annually; (D) A visual inspection of the secondary closure seal is conducted semi-annually; and (E) Any emergency roof drain is provided with a slotted fabric cover which covers at least 90% of the area opening. (2) The Permittee of any tank which uses the control devices specified in Subparagraphs (1)(i) or (1)(iv), Condition E.2, Table III.E of this Title V operating permit shall ensure that such thank meets the requirements of Subparagraphs (2)(i) – (2)(vi) below, Condition E.2, Table III.E of this Title V operating permit: (i) There are no visible holes, tears or other openings in the seal or any seal fabric or materials. (ii) All openings except stub drains are equipped with covers, lids or seals such that: (A) The cover, lid or seal is in the closed position at all times except in actual use; (B) Automatic bleeder vents are closed at all times except when the roof is being floated off or being landed on the roof leg supports; and (C) Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturers recommended setting. (iii) Routine inspections are conducted through roof hatches once per month.	Order No. 8011 & RCSA §22a-174-20(a)(2)	E.2	F

Section III: Applicable Requirements and Compliance Demonstration

E. EU-006, EU-007, EU-008 - ACRYLONITRILE AND STYRENE STORAGE TANKS EU-016BB - LATEX BUTADIENE STORAGE SPHERE

- **APPLICABLE REQUIREMENTS**

TABLE III.E: APPLICABLE REQUIREMENTS EU-006 - EU-008 & EU-016BB

Pollutants or Process Parameters	Emissions Unit No.	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number	F / S
VOC	EU-006 Acrylonitrile Storage Tank EU-016BB Latex Butadiene Storage Sphere	(iv) A complete inspection of cover and seal is conducted whenever the tank is emptied for non-operational reasons but in any event at least once per year. (v) Records of the average monthly storage temperature, true vapor pressure, monthly throughput and type of VOC stored are maintained and kept for a minimum of two years after such records is made. (vi) Records of the results of the inspections conducted under Subparagraphs (2)(iii) and (2)(iv), Condition E.2, Table III.E of this Title V operating permit are maintained and kept for a minimum of two years after such records is made.	Order No. 8011 & RCSA §22a-174-20(a)(2)	E.2	F
N/A	EU-007 & EU-008	There are no applicable requirements at this time for EU- 007 & EU-008.			

- **COMPLIANCE DEMONSTRATION**

E.1. **VOC:** The Permittee shall comply with the emissions control practices set forth in Conditions E.1 and E.2, Table III.E of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

E.1.a. **Monitoring and Testing Requirements**

i. All tank vent control systems shall be maintained in such a condition as designed to prevent and minimize emissions in accordance with good engineering practices as specified by the ASME Vessel Design Codes [Order No. 8011].

ii. All changes in pressure and vacuum settings for any of the tank vent control systems shall be submitted and approved by the Commissioner prior to implementing such changes [Order No. 8011].

E.1.b. **Reporting Requirements**

The Permittee shall notify the Commissioner if the tank is altered in any way [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

E.2.a. **Monitoring and Testing Requirements**

i. All tank vent control systems shall be maintained in such a condition as designed to prevent and minimize emissions in accordance with good engineering practices as specified by the ASME Vessel Design Codes [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

ii. All changes in pressure and vacuum settings for any of the tank vent control systems specified above shall be submitted and approved by the Commissioner prior to implementing such changes [Order No. 8011].

E.2.b. **Reporting Requirements**

The Permittee shall notify the Commissioner if the tank is altered in any way [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

Section III: Applicable Requirements and Compliance Demonstration

F. EU-009 - EU-015, EU-038, & EU-039 - Silo Pellet Systems

- **Applicable Requirements**

Table III.F: Applicable Requirements EU-009 - EU-015, EU-038 & EU-039

Pollutants or Process Parameters	Emissions Unit	Limitations or Restrictions	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F/S
TSP	EU-009 & EU-010 EU-038 & EU-039	19.3 lb/hour	RCSA §22a-174-18(f)	F.1	S
	EU-011, EU-012, & EU-013	29.6 lb/hour			
	EU-014	23.0 lb/hour			
	EU-015	10.9 lb/hour			

- **Compliance Demonstration**

F.1. **TSP:** Emissions of TSP shall not exceed those limits stated in condition F.1, Table III.F of this Title V operating permit during any one hour. Demonstration of compliance shall be based on the following requirements:

F.1.a. **Monitoring and Testing Requirements**

i. The Permittee shall monitor opacity and dust emissions from the particulate air filter system on a daily basis. The Permittee shall conduct a visual inspection during each round. When opacity or visual emissions are detected, the Permittee shall take immediate corrective action [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

ii. The Permittee shall verify the fabric filter is meeting a pollution control efficiency of 99.7% by monitoring the pressure differential and verifying that filters are operating in the recommended operating range. Filters shall be replaced on an average of once each year or whenever the process computer alerts the Permittee to replace such filters [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

iii. If required by the Commissioner, the Permittee shall conduct stack test using Method 5 of 40 CFR Part 60, Appendix A. Such stack tests shall be conducted at such intervals as the Commissioner may specify and in such a manner satisfactory to the Commissioner [RCSA §§22a-174-5(e)(1) & -5(e)(2)].

F.1.b. **Record Keeping Requirements**

i. The Permittee shall maintain records of visual emissions and any corresponding corrective actions taken [RCSA §22a-174-33(o)(1) & 40 CFR §70.6(a)(3)(iii)].

ii. The Permittee shall maintain records of excess pressure differential and filter maintenance, installation, replacement, and removal dates, whenever such action is taken [RCSA §22a-174-33(o)(1) & 40 CFR §70.6(a)(3)(iii)].

iii. If stack testing is required by the Commissioner, the Permittee shall keep records of test results [RCSA §22a-174-33(o)(1) & 40 CFR §70.6(a)(3)(iii)].

G. GEU-016 - LATEX PRODUCTION: EU-016 - THERMAL OXIDIZER

- **APPLICABLE REQUIREMENTS**

TABLE III.G: APPLICABLE REQUIREMENTS EU-016

Pollutant or Process Parameter	Fuel	Limitation or Restriction	Applicable Regulatory References /Citations	Compliance Demonstration Condition Number	F / S
NO_X	Natural Gas	Less than or equal to: ▪ 0.097 lb/MMBTU, 0.664 lb/hour ▪ 1.14 TPY	Permit No. 092-0016	G.1	F
	LPG	Less than or equal to: ▪ 0.208 lb/MMBTU, 1.283 lb/hour ▪ 0.067 TPY			
SO_X	Natural Gas	Less than or equal to: ▪ 0.001 lb/MMBTU, 0.004 lb/hour ▪ 0.007 TPY		G.2	F
	LPG	Less than or equal to: ▪ 0.00000131 lb/MMBTU, 0.0000081 lb/hour ▪ 0.00000042 TPY			
CO	Natural Gas	Less than or equal to: ▪ 0.020 lb/MMBTU, 0.139 lb/hour ▪ 0.239 TPY		G.3	F
	LPG	Less than or equal to: ▪ 0.035 lb/MMBTU, 0.216 lb/hour ▪ 0.011 TPY			
TSP/PM_{10}	Natural Gas	Less than or equal to : ▪ 0.012 lb/MMBTU, 0.08 lb/hour ▪ 0.137 TPY		G.4	F
	LPG	Less than or equal to: ▪ 0.003 lb/MMBTU, 0.018 lb/hour ▪ 0.001 TPY			
VOC	Natural Gas	**From the Thermal Oxidizer**, less than or equal to: ▪ 0.005 lb/MMBTU, 0.035 lb/hour ▪ 0.06 TPY		G.5	F
	LPG	**From the Thermal Oxidizer**, less than or equal to: ▪ 0.006 lb/MMBTU, 0.036 lb/hour ▪ 0.002 TPY			
	Not Applicable	**From the Latex Production**, less than or equal to: ▪ 0.039 lb/hour ▪ 0.17 TPY Note: The emissions from any new compounds for production or trial run shall be counted toward any applicable emissions limit.			

Section III: Applicable Requirements and Compliance Demonstration

G. GEU-016 - LATEX PRODUCTION: EU-016 - THERMAL OXIDIZER

- **APPLICABLE REQUIREMENTS**

TABLE III.G: APPLICABLE REQUIREMENTS EU-016

Pollutant or Process Parameter	Fuel	Limitation or Restriction	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F / S
Maximum Annual Fuel Usage	Natural Gas	22.8 MM ft^3 Natural Gas	Permit No. 092-0016	G.6	F
	LPG	7,000 gallons LPG			
Maximum Fuel Firing Rate Both Burners	Natural Gas	6,642 ft^3/hour			
	LPG	67.5 gallon/hour			
Minimum Operating Temperature	Natural Gas and LPG	Greater than or equal to 1600 ºF		G.7	F
Minimum Residence Time	Natural Gas and LPG	Greater than or equal to 1.00 second		G.8	F
Minimum Destruction Efficiency	Natural Gas and LPG	Greater than or equal to 99.9%		G.9	F
HAP (State)	Natural Gas and LPG	Actual stack concentration (ASC) shall be less than or equal to the maximum allowable stack concentration (MASC): MASC ($\mu g/m^3$) = 1508 x HLV Where, HLV = Hazard Limiting Value ($\mu g/m^3$) 1508 = A constant based on stack parameters ASC ($\mu g/m^3$) = lb/hour x 453 x 10^6/acfm/60/0.02832 Note: The emissions from any new compounds for production or trial run shall be counted toward any applicable emission limit in this permit.		G.10	F

Section III: Applicable Requirements and Compliance Demonstration

G. GEU-016 - LATEX PRODUCTION: EU-016 - THERMAL OXIDIZER

- **COMPLIANCE DEMONSTRATION**

G.1. **NO_X**: Emissions of NO_X shall not exceed those limits stated in Condition G.1, Table III.G of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

G.1.a. **Monitoring and Testing Requirements**

The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from Permit No. 092-0016 (stack test data, manufacturers data) and the hourly fuel firing rate and the annual fuel consumption rate [Permit No. 092-0016].

G.1.b. **Record Keeping Requirements**

The Permittee shall maintain monthly and annual records of actual NO_X emissions. Annual NO_X emissions shall be calculated each calendar month by adding the current calendar month's emissions to those of the previous eleven (11) months [RCSA §22a-174-4(c)(1)].

G.2. - G.4. SO_X, CO, and TSP/PM_{10}: Emissions of SO_X, CO, and TSP/PM_{10} shall not exceed those limits stated in Conditions G.2, G.3, and G.4, respectively, Table III.G of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

G.2. - G.4.

a. **Monitoring and Testing Requirements**

The Permittee shall ensure that the hourly fuel consumption rate for each fuel remains fixed so as not to exceed the hourly fuel flow rates in Condition G.6, Table III.G of this Title V operating permit [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

G.5. **VOC:** Emissions of VOC shall not exceed those limits stated in Condition G.5, Table III.G of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

G.5.a. **Monitoring and Testing Requirements**

i. The Permittee shall demonstrate compliance by calculating the emissions rates from the afterburner (hourly and instantaneous) using the hourly fuel firing rate and emissions factors from Permit No. 092-0016; and by calculating VOC emissions rate from the Latex Production facility using emissions factors from Permit No. 092-0016 [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

ii. The Permittee shall monitor and maintain the minimum operating temperature set forth in Condition G.7, Table III.G and the minimum residence time set forth in Condition G.8, Table III.G of this Title V operating permit to ensure that the 99.9% VOC destruction efficiency is met [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

iii. The Permittee shall not operate the Latex Production line without operating the thermal oxidizer [Permit No. 092-0016].

iv. If required by the Commissioner, emissions shall be measured using the average of three one-hour stack tests [RCSA §22a-174-5(e)(2)].

G. GEU-016 - LATEX PRODUCTION: EU-016 - THERMAL OXIDIZER

- **COMPLIANCE DEMONSTRATION**

G.5.b. Record Keeping Requirements

i. The Permittee shall maintain records of the monitored data required in Paragraph "a", Condition G.5, "*Monitoring and Testing Requirements,*" Section III.G of this Title V operating permit [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

ii. The Permittee shall maintain records of all tune-ups, repairs, replacement of parts and other maintenance performed [RCSA §22a-174-4(c)(1)].

iii. The Permittee shall maintain records of the dates, times, and places of all emissions testing, the persons performing the measurements, the test methods used, the operating conditions at time of testing, and the results of such testing when required [RCSA §22a-174-4(c)(1)].

G.6. Maximum Annual Fuel Usage/Maximum Fuel Firing Rate: The maximum annual fuel usage and maximum fuel firing rate shall not exceed those limits stated in Condition G.6, Table III.G of this Title V operating permit. Demonstration of compliance shall be based on the following requirements:

G.6.a. Monitoring and Testing Requirements

i. The Permittee shall ensure that the hourly fuel consumption rate remains fixed for each fuel so as not to exceed the hourly fuel flow rates in Condition G.6, Table III.G of this Title V operating permit [Permit No. 092-0016].

ii. The Permittee shall monitor monthly and annual amounts of each fuel consumed. If more than one fuel or waste supply tank services the thermal oxidizer, the Permittee shall use a fuel-metering device to continuously monitor fuel consumption for each fuel. The Permittee shall determine annual fuel consumption by adding (for each fuel) the current month's fuel usage to that of the previous eleven (11) months. The Permittee shall make these calculations on a monthly basis [Permit No. 092-0016].

G.6.b. Record Keeping Requirements

The Permittee shall maintain records of data monitored required above in Paragraph "a", Condition G.6, "*Monitoring and Testing Requirements,*" Section III.G of this Title V operating permit [Permit No. 092-0016].

G.7. Minimum Operating Temperature: The minimum operating temperature of the thermal oxidizer shall not be less than the limit stated in Condition G.7, Table III.G of this Title V operating permit. The Permittee shall demonstrate compliance by maintaining good operational practices, following the manufacturers instructions, and by maintaining an operating temperature no less than 1600 ºF [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

G.8. Minimum Residence Time: The minimum residence time shall not drop below the limit stated in Condition G.8, Table III.G of this Title V operating permit. The Permittee shall demonstrate compliance by maintaining good operational practices, following the manufacturers instructions, and by maintaining a minimum residence time of at least 1.00 second [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

G.9. Minimum Destruction Efficiency: The minimum destruction efficiency shall be no less than the limit stated in Condition G.9, Table III.G of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

G. GEU-016 - LATEX PRODUCTION: EU-016 - THERMAL OXIDIZER

- **COMPLIANCE DEMONSTRATION**

G.9.a. Monitoring and Testing Requirements, Continued

i. The Permittee shall operate the thermal oxidizer at all times the Latex Production line are operating [Permit No. 092-0016].
ii. The Permittee shall demonstrate compliance by maintaining good operational practices and following the manufacturers instructions [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].
iii. The Permittee shall maintain the minimum operating temperature and minimum residence time as specified in Conditions G.7 and G.8, Table III.G of this Title V operating permit [Permit No. 092-0016].
iv. The Permittee shall maintain the thermal oxidizer as per the manufacturers instructions and have it serviced and cleaned at least once every 12-months [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

G.10. HAP: The actual stack concentration (ASC) for each HAP shall not exceed its respective MASC as stated in Condition G.10, Table III.G of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

G.10.a. Monitoring and Testing Requirements

i. The Permittee shall ensure that the ASC for any HAP shall not exceed its respective maximum allowable stack concentration (MASC). The MASC of any HAP listed in Table 29-1, RCSA §22a-174-29, shall be determined using Equation No. 4 below [RCSA §§22a-174-29(b), 22a-174-29(c), & Permit No. 092-0016]:

$$MASC\ (\mu g/m^3) = 1508 \times HLV \qquad (4)$$

Where,
HLV = Hazard Limiting Value ($\mu g/m^3$)
1508 = A constant based on stack parameters

The ASC shall be derived using each HAP content as a worst case. This gives an ASC in pounds per hour (lb/hour) that can be converted to $\mu g/m^3$:

$$ASC\ (\mu g/m^3) = lb/hour \times 453 \times 106/acfm/60/0.02832$$

ii. The Permittee shall monitor operating parameters of the thermal oxidizer and maintain operation in accordance with applicable manufacturers instructions. The Permittee shall not operate the Latex Production line without operating the thermal oxidizer [RCSA §§22a-174-29(b) & 22a-174-7(a)].
iii. No person shall deliberately shutdown the thermal oxidizer while the Latex Production Lines are in operation except for such necessary maintenance as cannot be accomplished when the thermal oxidizer is not in operation and is not emitting air pollutants [RCSA §22a-174-7(b)].
iv. The Permittee may be required to conduct testing to determine concentration of HAPs should the Commissioner determine that operation of the Latex Production Lines might reasonably be expected to cause an exceedance of an applicable Hazard Limiting Value (HLV) or Ambient Air Quality Standard [RCSA §22a-174-29(e)(1)].

Section III: Applicable Requirements and Compliance Demonstration

G. GEU-016 - LATEX PRODUCTION: EU-016 - THERMAL OXIDIZER

- **COMPLIANCE DEMONSTRATION**

G.10.b. **Record Keeping Requirements**

i. The Permittee shall keep records of all materials used, total hours of operation per day and all applicable Material Safety Data Sheets (MSDS) or Certified Product Data Sheets or other technical data sheets [Permit No. 092-0016].

ii. The Permittee shall maintain records of MASC and actual stack concentration calculations verifying compliance with RCSA §22a-174-29 [§22a-174-29(c) & 40 CFR §70.6(a)(3) & RCSA §22a-174-33(j)(1)(K)].

iii. The Permittee shall maintain records certifying that the thermal oxidizer is operated and maintained in accordance with applicable manufacturer instructions [RCSA §§22a-174-29(c) & 22a-174-7(a)].

Section III: Applicable Requirements and Compliance Demonstration

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-016

Pollutants or Process Parameters	Emissions Unit	Limitations or Restrictions	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F/S
Maximum Annual Latex Production	GEU-016 (Latex Production)	The Permittee shall not exceed a maximum annual latex production rate of 170,000 TPY latex product.	Permit No. 092-0016	H.1	F
VOC	EU-016C (Styrene Scrubber) EU-016H & EU-016K (Vacuum Coolers) EU-016BB (Butadiene Storage Sphere)	(a) Process and fugitive allowable annual emissions on an aggregate basis from the styrene scrubber liquor exhaust which vents to the thermal oxidizer, the two vacuum cooler blend tanks, and the butadiene storage sphere are limited to no more than 82.24 TPY of VOC. (b)The styrene scrubber must maintain a minimum overall control efficiency of 91%.	Order No. 8011 (RCSA §22a-174-20(ee)(1))	H.2	F

Section III: Applicable Requirements and Compliance Demonstration

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

NOTE: CONDITIONS H.3.1, H.3.2(1) – H.3.2(3), H.3.3, AND H.3.4(1) - H.3.4(15) ARE FEDERALLY ENFORCEABLE

TABLE III.H: APPLICABLE REQUIREMENTS GEU-016

Pollutant or Process Parameter	Emissions Unit No.	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP* (Federal)	GEU-016	The Permittee shall identify and categorize each storage vessel and process vent as one of the following: (a) **Storage Vessels**: A storage vessel (SV) at an existing affected source that meets the applicability criteria specified in Paragraphs (a)(1) and (a)(2) below of Condition H.3.1, Table III.H of this Title V operating permit. (1) Group 1 Storage Vessel: (i) 75 m^3 ≤ Capacity ≤ 151 m^3 and Vapor Pressure (VP) ≥ 13.1 kPa [19,997.82 gallons ≤ Capacity ≤ 39,889 gallons and VP ≥ 1.89 PSI] (ii) 151 ≤ Capacity and Vapor Pressure ≥ 5.2 kPa [Capacity ≥ 39,889 gallons and VP ≥ 0.754 PSI] (2) Group 2 Storage Vessel: A storage vessel that does not fall within the definition of a Group 1 SV. (3) Storage vessels described in Paragraph (a)(3)(i) – (a)(3)(v), Condition H.3.1, Table III.H of this Title V operating permit are exempt from the storage vessel requirements set forth in Conditions H.3.2(1) – H.3.2(3), Table III.H of this Title V operating permit: (i) SV containing styrene-butadiene latex; (ii) SV containing other latex products and located downstream of stripping operations; (iii) SV containing high conversion latex products; (iv) SV containing styrene; and (v) SV containing acrylamide; and SV containing epichlorohydrin. (b) **Process Vents:** (1) Group 1 Batch Front-End Process Vent: A batch front-end process vent releasing organic HAP emissions greater than or equal to 11,800 Kg/year and with a cutoff flow rate, greater than or equal to the annual average flow rate. (2) Group 2 Batch Front-End Process Vent: A batch front-end process vent that does not fall within the definition of a Group 1 batch front-end process vent. (3) Group 1 Continuous Front-End Process Vent: Means a continuous front-end process vent releasing a gaseous emissions stream that has a total resource effectiveness index value, calculated according to 40 CFR §63.115 less than or equal to 1.0. (4) Group 2 Continuous Front-End Process Vent: Means a continuous front-end process vent that does not fall within the definition of a Group 1 continuous front-end process vent.	**40 CFR Part 63, Subpart U** **"*NESHAP for Group I Polymers & Resins*"** 40 CFR §63.482 *Definitions*	H.3.1

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-016

Pollutant or Process Parameter	Emissions Unit No.	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	(Group 1) EU-016BB (Group 2) EU-016F EU-016G EU-016Q EU-016T EU-016CC EU-016DD EU-016FF	**Storage Vessels**: The Permittee shall comply with the requirements of Paragraphs (a)(1), (a)(2), and (a)(3) of Condition H.3.2(1), Table III.H of this Title V operating permit: (a) (1) Each Group 1 storage vessel storing a liquid for which the maximum true vapor pressure of the total organic hazardous air pollutants in the liquid is less than 76.6 kPa, the Permittee shall reduce HAP emissions to the atmosphere either by operating and maintaining a fixed roof and internal floating roof, an external floating roof, an external floating roof converted to an internal floating roof, or a closed vent system and control device, or routing the emissions to a process or a fuel gas system in accordance with Condition H.3.2(2), Table III.H of this Title V operating permit. (2) Each Group 1 storage vessel storing a liquid for which the maximum true vapor pressure of the total organic hazardous air pollutants in the liquid is greater than or equal to 76.6 kPa, the Permittee shall operate and maintain a closed vent system and control device meeting the requirements specified in 40 CFR §63.119(e) or route the emissions to a process or a fuel gas system as specified in Paragraph (b), Condition H.3.2(2), Table III.H of this Title V operating permit. (3) For each Group 2 storage vessel the Permittee shall comply with the record keeping requirements in Paragraph "b", Conditions H.3.1 and H.3.2(1) - H.3.2(3), Compliance Demonstration, Section III.H of this Title V operating permit and is exempt from provisions in Conditions H.3.(2) - H.3.2(3), Table III.H of this Title V operating permit.	**40 CFR §63.484** **(40 CFR Part 63, Subpart G "*SOCMI for Process Vents, Storage Vessels, Transfer Operations, and Wastewater*")**	H.3.2(1)
	(Group 1) EU-016BB	(a) 40 CFR §63.119(e): The Permittee who elects to use a closed vent system and control device, to comply with the requirements above of Paragraphs (a)(1) and (a)(2), Condition H.3.2(1), Table III.H shall comply with the requirements specified in Paragraphs (a)(1) through (a)(5), Condition H.3.2(2), Table III.H of this Title V operating permit: (1) The control device shall be designed and operated to reduce inlet emissions of total organic HAP by 95% or greater. (2) If the Permittee can demonstrate that a control device installed on a storage vessel on or before December 31, 1992 is designed to reduce inlet emissions of total organic HAP by greater than or equal to 90% but less than 95%, then the control device is required to be operated to reduce inlet emissions of total organic HAP by 90% or greater. (3) Period of planned routine maintenance of the control device, during which the control device does not meet the specifications of Paragraph (a)(1) or (a)(2) above, Condition H.3.2(2), Table III.H of this Title V operating permit as applicable, shall not exceed 240 hours per year.	40 CFR §63.119 "*Storage Vessels Provision - Reference Control Technology*"	H.3.2(2)

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-016

Pollutant or Process Parameter	Emissions Unit No.	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	(Group 1) EU-016BB	(4) The specifications and requirements in Paragraphs (a)(1) and (a)(2), Condition H.3.2(2), Table III.H of this Title V operating permit, for control devices do not apply during periods of planned routine maintenance. (5) The specifications and requirements in Paragraphs (a)(1) and (a)(2), Condition H.3.2(2), Table III.H of this Title V operating permit for control devices do not apply during a control system malfunction. (6) The Permittee may use a combination of control devices to achieve the required reduction of total organic HAP specified in Paragraph (a)(1), Condition H.3.2(2), Table III.H of this Title V operating permit. The Permittee may use a combination of control devices installed on a storage vessel on or before December 31, 1992 to achieve the required reduction of total organic HAPs specified in Paragraph (a)(2), Condition H.3.2(2), Table III.H of this Title V operating permit.	**40 CFR §63.484** **(Subpart G)** 40 CFR §63.119 "*Storage Vessels Provisions - Reference Control Technology*"	H.3.2(2) Continued

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-016

Pollutant or Process Parameter	Emissions Unit No.	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	(Group 1) EU-016BB	(a) To demonstrate compliance with Paragraph (a), Condition H.3.2(2), Table III.H of this Title V operating permit using a control device other than a flare, the Permittee shall comply with the requirements in Paragraphs (a)(1) - (a)(2), Condition H.3.2(3), Table III.H of this Title V operating permit. (1) The Permittee shall either prepare a design evaluation, which includes the information specified in Paragraph (a)(1)(i), Condition H.3.2(3), Table III.H of this Title V operating permit or submit the results of a performance test as described in Paragraph (a)(1)(ii), Condition H.3.2(3), Table III.H of this Title V operating permit. (i) The design evaluation shall include documentation demonstrating that the control device being used achieves the required control efficiency during reasonably expected maximum filling rate. This documentation is to include a description of the gas stream which enters the control device, including flow and organic HAP content under varying liquid level conditions, and the information specified in Paragraphs (a)(1)(i)(A) - (a)(1)(i)(E), Condition H.3.2(3), Table III.H of this Title V operating permit as applicable. (A) If the control device receives vapors, gases or liquids, other than fuels, from emission points other than storage vessels subject to this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids, other than fuels, received by the control device. (B) If an enclosed combustion device with a minimum residence time of 0.5 seconds and a minimum temperature of 760 °C is used to meet the emission reduction requirement specified in Paragraph (a)(1) or (a)(2), Condition H.3.2(2), Table III.H of this Title V operating permit (40 §63.119(e)(1) or (e)(2)), as applicable, documentation that those conditions exist is sufficient to meet the requirements of Paragraph (a)(1)(i), Condition H.3.2(3), Table III.H of this Title V operating permit. (C) Except as provided in Paragraph (a)(1)(i)(B), Condition H.3.2(3), Table III.H of this Title V operating permit for thermal incinerators, the design evaluation shall include the auto-ignition	**40 CFR §63.484** **(Subpart G)** 40 CFR §63.120 "*Storage Vessels Provisions - Procedures to Determine Compliance*"	H.3.2(3)

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-016

Pollutant or Process Parameter	Emissions Unit No.	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	(Group 1) EU-016BB	temperature of the organic HAP, the flow rate of the organic HAP emission stream, the combustion temperature, and the residence time at the combustion temperature. (ii) The Permittee is not required to prepare a design evaluation for the control device as described in Paragraph (a)(1)(i), Condition H.3.2(3), Table III.H of this Title V operating permit if the performance tests meets the criteria specified in Paragraphs (a)(1)(ii)(A) and (a)(1)(ii)(B), Condition H.3.2(3), Table III.H of this Title V operating permit. (A) The performance test demonstrates that the control device achieves greater than or equal to the required control efficiency specified in Paragraph (a)(1) or (a)(2), Condition H.3.2(2), Table III.H of this Title V operating permit [40 CFR §63.119(e)(1) or (e)(2)], as applicable; and (B) The performance test is submitted as part of the Notification of Compliance Status required by 40 CFR §63.151(b) of Subpart G. (2) The Permittee shall submit, as part of the Notification of Compliance Status required by 40 CFR §63.151(b) of Subpart G, a monitoring plan containing the information specified in Paragraph (a)(2)(i) of this section and in either Paragraph (a)(2)(ii) or (a)(2)(iii), Condition H.3.2(3), Table III.H of this Title V operating permit. (i) A description of the parameter or parameters to be monitored to ensure that the control device is being properly operated and maintained, an explanation of the criteria used for selection of that parameter (or parameters), and the frequency with which monitoring will be performed (e.g., when the liquid level in the storage vessel is being raised); and either (ii) The documentation specified in Paragraph (a)(1)(i), Condition H.3.2(3), Table III.H of this Title V operating permit if the Permittee elects to prepare a design evaluation; or	**40 CFR §63.484** **(Subpart G)** 40 CFR §63.120 "*Storage Vessels Provisions- Procedures to Determine Compliance*"	H.3.2(3) Continued

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-016

Pollutant or Process Parameter	Emissions Unit No.	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	(Group 1) EU-016BB	(iii) The information specified in Paragraph (a)(2)(iii)(A) and (B), Condition H.3.2(3), Table III.H of this Title V operating permit if the Permittee elects to submit the results of a performance test. (A) Identification of the storage vessel and control device for which the performance test will be submitted, and (B) Identification of the emission point(s) that share the control device with the storage vessel and for which the performance test will be conducted. (3) The Permittee shall submit, as part of the Notification of Compliance Status required by 40 CFR §63.152(b) of Subpart G, the information specified in Paragraphs (a)(3)(i) and, if applicable, (a)(3)(ii), Condition H.3.2(3), Table III.H of this Title V operating permit. (i) The operating range for each monitoring parameter identified in the monitoring plan. The specified operating range shall represent the conditions for which the control device is being properly operated and maintained. (ii) Results of the performance test described in Paragraph (a)(1)(ii), Condition H.3.2(3), Table III.H of this Title V operating permit. (4) The Permittee shall demonstrate compliance with the requirements of Paragraph (a)(3), Condition H.3.2(2), Table III.H of this Title V operating permit (40 CFR §63.119(e)(3)) (planned routine maintenance of a control device, during which the control device does not meet the specifications of Paragraph (a)(1) or (a)(2), Condition H.3.2(2), Table III.H of this Title V operating permit (40 CFR §63.119(e)(1) or (e)(2)), as applicable, shall not exceed 240 hours per year) by including in each Periodic Report required by 40 CFR §63.152(c) of Subpart G the information specified in 40 CFR §63.122(g)(1) of Subpart G. (5) The Permittee shall monitor the parameters specified in the Notification of Compliance Status required in 40 CFR §63.152(b) of Subpart G or in the operating permit and shall operate and maintain the control device such that the monitored parameters remain within the ranges specified in the Notification of Compliance Status. (6) Except as provided in Paragraph (a)(7), Condition H.3.2(3), Table III.H of this Title V operating permit each closed vent system shall be inspected as specified in 40 CFR §63.148 of Subpart G. The initial and annual inspections required by 40 CFR §63.148(b) of Subpart G shall be done during filling of the storage vessel. (7) For any fixed roof tank and closed vent system that are operated and maintained under negative pressure, the Permittee is not required to comply with the requirements specified in 40 CFR §63.148 of Subpart G.	**40 CFR §63.484** **(Subpart G)** 40 CFR §63.120 "*Storage Vessels Provisions-Procedures to Determine Compliance*"	H.3.2(3) Continued

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-016

Pollutant or Process Parameter	Emissions Unit No.	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	(Group 1) EU-016C (Styrene Scrubber)	**Continuous Front-End Process Vents:** The Permittee shall comply with the requirements of Paragraph (a)(1), Condition H.3.3, Table III.H of this Title V operating permit: (1) Reduce emissions of total organic HAP by 98% (by weight) or to a concentration of 20 ppmv, whichever is less stringent. For combustion devices, the emission reduction or concentration shall be calculated on a dry basis, corrected to 3% O_2, and compliance can be determined by measuring either organic HAP or total organic carbon using the procedures in 40 CFR §63.116. Compliance with this Paragraph (a)(1), Condition H.3.3, Table III.H of this Title V operating permit may be achieved by using any combination of combustion, recovery, and/or recapture devices, except that a recovery device may not be used to comply with Paragraph (a)(1), Condition H.3.3, Table III.H of this Title V operating permit by reducing emissions of total organic HAP by 98% (by weight) except as provided in Paragraph (a)(1)(i) below: (i) A recovery device may be used alone or in combination with one or more combustion or recapture devices to reduce emissions of total organic HAP by 98% (by weight) if all the conditions of Paragraphs (a)(1)(i)(A) – (a)(1)(i)(C) are met:	**40 CFR §63.485 (Subpart G)** 40 CFR §63.113 "*Continuous Front-End Process Vents Provisions*"	H.3.3

H. GEU-016 - Latex Production:

- **EU-016A - EU-016AA - Reactors, Supporting Equipment, and Scrubber; EU-016BB - Butadiene Storage Sphere**
- **EU-016CC - Acrylic Acid Tank; EU-016DD - Tertiary-Dodecyl-Mercaptan Tank**
- **EU-016EE - Ammonium Hydroxide Storage Tank; EU-016FF - Hydroxyl-Ethyl-Acrylate Tank**

- **Applicable Requirements**

Table III.H: Applicable Requirements GEU-016

Pollutant or Process Parameter	Emissions Unit No.	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	(Group 1) EU-016C (Styrene Scrubber)	(A) The recovery device (and any combustion device or recapture device which operates in combination with the recovery device to reduce emissions of total organic HAP by 98% (by weight)) is the last recovery device before emissions to the atmosphere. (B) The recovery device alone or in with one or more combustion or recapture devices is capable of reducing emissions of total organic HAP by 98% (by weight), but is not capable of reliably reducing emissions of total organic HAP to a concentration of 20 ppmv. (C) If the Permittee disposed of the recovered material, the recovery device would comply with the requirements of this subpart for recapture devices.	**40 CFR §63.485** (**Subpart G**) 40 CFR §63.113 "*Continuous Front-End Process Vents Provisions*"	H.3.3 Continued
	GEU-016	(a) The Permittee shall comply with the requirements of **Conditions H.3.4(1) - H.3.4(15), Table III.H** of this Title V operating permit (40 CFR Part 63, Subpart H) for all equipment in organic HAP service, with the exceptions noted in Paragraphs (b) – (g) below, Condition H.3.4, Table III.H of this Title V operating permit. (b) Surge control vessels and bottoms receivers described in Paragraphs (b)(1) – (b)(6), Condition H.3.4(9), Table III.H of this Title V operating permit are exempt from the requirements to comply with Condition H.3.4(9), Table III.H of this Title V operating permit (40 CFR §63.170). (1) Surge control vessels and bottoms receivers containing styrene-butadiene latex; (2) Surge control vessels and bottoms receivers containing other latex products and located downstream of the stripping operations; (3) Surge control vessels and bottoms receivers containing high conversion latex products; (4) Surge control vessels and bottoms receivers containing styrene; (5) Surge control vessels and bottoms receivers containing acrylamide; and (6) Surge control vessels and bottoms receivers containing epichlorohydrin.	**40 CFR Part 63, Subpart U (Group IV Polymer and Resins)** **40 CFR §63.502** **(40 CFR Part 63, Subpart H, "*Equipment Leak Provisions*")**	H.3.4(1) - H.3.4(15)

H. GEU-016 - Latex Production:

- **EU-016A - EU-016AA - Reactors, Supporting Equipment, and Scrubber; EU-016BB - Butadiene Storage Sphere**
- **EU-016CC - Acrylic Acid Tank; EU-016DD - Tertiary-Dodecyl-Mercaptan Tank**
- **EU-016EE - Ammonium Hydroxide Storage Tank; EU-016FF - Hydroxyl-Ethyl-Acrylate Tank**

- **Applicable Requirements**

Table III.H: Applicable Requirements GEU-016

Pollutant or Process Parameter	Emissions Unit No.	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal), Continued	GEU-016	(c) The compliance date for the equipment leak provisions is no later than July 31, 1997 (provided in 40 CFR §63.481). (d) For an affected source producing polybutadiene rubber and styrene butadiene rubber by solution, the indications of liquids dripping, as defined in 40 CFR Part 63, Subpart H, from bleed ports in pumps and agitator seals in light liquid service, shall not be considered a leak. For the purposes of this Condition, a bleed port is a technologically-required feature of the pump or seal whereby polymer fluid used to provide lubrication and/or cooling of the pump or agitator shaft exits the pump, thereby resulting in a visible dripping of fluid. (e) The Permittee subject to this Subpart is not required to submit the Initial Notification required by Paragraph "c.i", Conditions H.3.4(1) – H.3.4(15), Compliance Demonstration of this Title V operating permit (40 CFR §63.182(a)(1) and §63.182(b)). (f) The Notification of Compliance Status required by Paragraph "c.ii", Conditions H.3.4(1) – H.3.4(15), Compliance Demonstration of this Title V operating permit (40 CFR §§63.182(a)(2) and 182(c)) shall be submitted within 150 days of the applicable compliance date specified in 40 CFR §63.481 for the equipment leak provisions. The notification can be submitted as part of the Notification of Compliance Status required by 40 CFR §63.506(e)(5). (g) The Periodic Reports required by 40 CFR §§63.182(a)(3) and 63.182(d) shall be submitted as part of the Periodic Reports required by 40 CFR §63.506(e)(6).	**40 CFR §63.502** **(40 CFR Part 63, Subpart H, "*Equipment Leak Provisions*")**	H.3.4(1) - H.3.4.(15)

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	**Standards: General [40 CFR §63.162]:** (a) The provisions of Conditions H.3.4(1) - H.3.4(15), Table III.H of this Title V operating permit apply to pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, instrumentation systems, and control devices. (b) Each piece of equipment subject to Conditions H.3.4(1) - H.3.4(15), Table III.H of this Title V operating permit shall be identified such that it can be distinguished readily from equipment that is not subject to this Condition [40 CFR §63.162]. (c) Equipment that is in vacuum service is excluded from the requirements in Condition H.3.4(1) - H.3.4(15), Table III.H of this Title V operating permit. (d) When each leak is detected, the following requirements apply: (1) A weatherproof and readily visible identification marked with the equipment identification number, shall be attached to the leaking equipment. (2) The identification on a valve may be removed after it has been monitored as specified in Condition H.3.4(7), Table III.H, of this Title V operating permit and no leak has been detected during the follow-up monitoring. (3) The identification which has been placed on equipment determined to have a leak, except for a valve or for a connector, may be removed after it is repaired. (e) All terms that define a period of time for completion of required tasks refer to the standard calendar period. (f) Where the Permittee is required to repair leaks by a specified time after the leak is detected, it is a violation of this Title V operating permit and 40 CFR Part 63, Subpart H to fail to take action to repair the leaks within the specified time. If action is taken to repair the leaks within the specified time, failure of that action to successfully repair the leak is not a violation. However, if the repairs are unsuccessful, the Permittee shall take further actions as required in this Conditions H.3.4(1) - H.3.4(15), Table III.H of this Title V operating permit.	**40 CFR §63.502** **(40 CFR Part 63, Subpart H, "*Equipment Leaks*")** 40 CFR §63.162 "*Standards: General*"	H.3.4(1)
		The following provisions apply to each pump that is in light liquid service (light liquid service means that a piece of equipment in organic hazardous air pollutant service contains a liquid that meets the following conditions: The vapor pressure of one or more of the organic compounds is greater than 0.3 Kilopascals at 20 °C, the total organic concentration of the pure organic compounds constituents having a vapor pressure greater than 0.3 Kilopascals at 20 °C is equal to or greater than 20% by weight of the total process stream, and the fluid is a liquid at operating conditions):	**40 CFR §63.502** **(Subpart H)** 40 CFR §63.163 "*Standards: Pumps in Light Liquid Service*"	H.3.4(2)

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(a) The Permittee shall monitor each pump monthly to detect leaks by the method specified in Paragraph "a.i", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.H of this Title V operating permit. (b) Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected [40 CFR §63.163(b)(3)] (c) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected [40 CFR §63.163(c)(1)]. (d) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not limited to, the following practices where practicable [40 CFR §63.163(c)(2)]: (1) Tightening of packing gland nuts. (2) Ensuring that the seal flush is operating at design pressure and temperature. (e) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements above , provided the following requirements are met [40 CFR §63.163(e)]: (1) Each dual mechanical seal system is operated with the barrier fluid at a pressure that is at all time greater than the pump stuffing box pressure; or (2) Is equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with Condition H.3.4(11), Table III.H of this Title V operating permit; or is equipped with a closed-loop system that purges the barrier fluid into a process stream. (3) The barrier fluid is not in light liquid service. (4) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both. (5) Each pump is checked by visual inspection each calendar week for indications of liquid dripping from the pump seal. For an affected source producing polystyrene resin, the indications of liquids dripping from bleed ports in pumps in light liquid service shall not be considered to be a leak. A bleed port is a technologically-required feature of the pump or seal whereby polymer fluid used to provide lubrication and/or cooling of the pump exits the pump, thereby resulting in a visible dripping of fluid [40 CFR §63.1331(a)(1)]. If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the pump shall be monitored as specified in Paragraph "a.i", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.H of this Title V operating permit to determine if there is a leak of organic HAP in the barrier fluid. (6) If an instrument reading of 1,000 ppm or greater is measured, a leak is detected. (7) Each sensor is observed daily or is equipped with an alarm unless the pump is located within the boundary of an unmanned plant site.	**40 CFR §63.502** **(Subpart H)** 40 CFR §63.163 "*Standards: Pumps in Light Liquid Service*"	H.3.4(2) Continued

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(8) The Permittee determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both. (9) If indications of liquids dripping from the pump seal exceed the criteria above or the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected. (10) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected. (11) A first attempt at repair shall be made no later than 5 calendar days after it is detected. (f) Any pump that is designed with no externally actuated shaft penetrating the pump housing is exempt from Paragraphs (a) - (c), Condition H.3.4(2), Table III.H of this Title V operating permit. (g) Any pump equipped with a closed vent system capable of capturing and transporting any leakage from the seal(s) to a process or to a fuel gas system or to a control device is exempt from Paragraphs (b) - (e), Condition H.3.4(2), Table III.H of this Title V operating permit (40 CFR §63.163(b) - (e)). (h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of Paragraphs (b)(3) and (e)(4), Condition H.3.4(2), Table III.H of this Title V operating permit and the daily requirements of Paragraph (e)(5), Condition H.3.4(2), Table III.H of this Title V operating permit provided that each pump is visually inspected as often as practicable and at least monthly. (i) If more than 90% of the pumps at a process unit meet the criteria in either Paragraph (d) or Paragraph (f), Condition H.3.4(2), Table III.H the process unit is exempt from Paragraph (d), Condition H.3.4(2), Table III.H of this Title V operating permit. (j) Any pump that is designated as describe in Paragraph "b.ii.(7)(A)", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration , Section III.B, of this Title V operating permit as an unsafe-to-monitor pump is exempt from Paragraphs (b) - (e), Condition H.3.4(2), Table III.H of this Title V operating permit if: (1) The Permittee determines that the pump is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence; and (2) The Permittee has a written plan that requires monitoring of the pump as frequently as practical during safe-to-monitor times, but no more frequently than the periodic monitoring schedule otherwise applicable.	**40 CFR §63.502** (**Subpart H**) 40 CFR §63.163 "*Standards: Pumps in Light Liquid Service*"	H.3.4(2) Continued

H. GEU-016 - Latex Production:

- **EU-016A - EU-016AA - Reactors, Supporting Equipment, and Scrubber; EU-016BB - Butadiene Storage Sphere**
- **EU-016CC - Acrylic Acid Tank; EU-016DD - Tertiary-Dodecyl-Mercaptan Tank**
- **EU-016EE - Ammonium Hydroxide Storage Tank; EU-016FF - Hydroxyl-Ethyl-Acrylate Tank**

- **Applicable Requirements**

Table III.H: Applicable Requirements GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in Paragraphs (h) and (i), Condition H.3.4(3), Table III.H of this Title V operating permit. (b) Each compressor seal system shall be: (1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or (2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system to a control device; or (3) Equipped with a closed-loop system that purges the barrier fluid directly into a process stream. (c) The barrier fluid shall not be in light liquid service. (d) Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system or both. (e) Each sensor shall be observed daily or shall be equipped with an alarm unless the compressor is located within the boundary of an unmanned plant site. The Permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. (f) If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion above, a leak is detected. (g) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (h) A compressor is exempt from Paragraphs (a) - (f), Condition H.3.4(3), Table III.H of this Title V operating permit if it is equipped with a closed-vent system to capture and transport leakage from the compressor drive shaft seal back to a process or a fuel gas system or to a control device that complies with Condition H.3.4(11), Table III.H of this Title V operating permit. (i) Any compressor that is designated, to operate with an instrument reading of less than 500 ppm above background, is exempt from the requirements of Paragraphs (a) - (h), Condition H.3.4(3), Table III.H of this Title V operating permit if the compressor: (1) Is demonstrated to be operating with an instrument reading of less than 500 ppm above background, as measured [50 CFR §63.180(c)]. (2) Is tested for compliance with Paragraph (i)(1), Condition H.3.4(3), Table III.H of this Title V operating permit initially upon designation, annually, and at other times requested by the Administrator.	**40 CFR §63.502** **(Subpart H)** 40 CFR §63.164 "*Standards: Compressors*"	H.3.4(3)

H. GEU-016 - Latex Production:

- **EU-016A - EU-016AA - Reactors, Supporting Equipment, and Scrubber; EU-016BB - Butadiene Storage Sphere**
- **EU-016CC - Acrylic Acid Tank; EU-016DD - Tertiary-Dodecyl-Mercaptan Tank**
- **EU-016EE - Ammonium Hydroxide Storage Tank; EU-016FF - Hydroxyl-Ethyl-Acrylate Tank**

- **Applicable Requirements**

Table III.H: Applicable Requirements GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with an instrument reading of less than 500 ppm above background except as provided in Paragraph (b), Condition H.3.4(4), Table III.H of this Title V operating permit. (b) After each pressure release, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release. No later than 5 calendar days after the pressure release and being returned to organic HAP service, the pressure relief device shall be monitored to confirm the condition indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Paragraph "a.ii", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.H of this Title V operating permit. (c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in Condition H.3.4(11), Table III.H of this Title V operating permit (40 CFR §63.172) is exempt from the above requirements. (d) (1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements above in Paragraphs (a) and (b), Condition H.3.4(4), Table III.H provided the Permittee complies with Paragraph (d)(2), Condition H.3.4(4), Table III.H of this Title V operating permit. (2) After each pressure release, a rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release.	**40 CFR §63.502** **(Subpart H)** 40 CFR §63.165 "*Standards: Pressure Relief Devices in Gas/Vapor Services*"	H.3.4(4)
		(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system. Gases displaced during filling of the sample container are not required to be collected or captured. (b) Each closed-purged, closed-loop, or closed-vent system shall: (1) Return the purged process fluid directly to the process line; or (2) Collect and recycle the purged process fluid to a process; or (3) Be designed and operated to capture and transport the purged process fluid to a control device that complies with the requirements of Condition H.3.4(11), Table III.H of this Title V operating permit; or (4) Collect, store, and transport the purged process fluid to a system identified in Paragraphs (4)(i) - (4)(iii), Condition H.3.4(5), Table III.H of this Title V operating permit (below): (i) A waste management unit operated in compliance with 40 CFR Part 63, Subpart G; (ii) A treatment, storage, or disposal facility subject to 40 CFR Part 262, 264, 265, or 266; or (iii) A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR Part 261. (c) In-situ sampling systems and systems without purges are exempt from Paragraphs (a) and (b), Condition H.3.4(5), Table III.H of this Title V operating permit.	**40 CFR §63.502** **(Subpart H)** 40 CFR §63.166 "*Standards: Sampling Connection Systems*"	H.3.4(5)

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(a) (1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. (2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair. (b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. (c) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with Paragraph (a), Condition H.3.4(6), Table III.H of this Title V operating permit at all other times. (d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from Paragraphs (a), (b), and (c), Condition H.3.4(6), Table III.H of this Title V operating permit. (e) Open-ended valves or lines containing materials which would autocatalytically polymerize or, would present an explosion, serious over pressure, or other safety hazard if capped or equipped with a double block and bleed system are exempt from the requirements of Paragraphs (a) - (c), Condition H.3.4(6), Table III.H of this Title V operating permit.	**40 CFR §63.502** **(Subpart H)** 40 CFR §63.167 "*Standards: Open-ended Valves or Lines*"	H.3.4(6)
		(a) The provisions in Condition H.3.4(7), Table III.H of this Title V operating permit apply to valves that are either in gas service or in light liquid service. (1) The provision are to be implemented on the dates below (set forth below in 40 CFR Part 63, Subpart U). (i) The phases of compliance (for existing sources) for this standard are; (A) **Phase I**, beginning on the compliance date (**July 31, 1997**); (B) **Phase II**, beginning no later than 1 year after the compliance date (**July 31, 1998**); and (C) **Phase III**, beginning no later than 2.5 years after the compliance date (**January 31, 2001**). (2) The use of monitoring data generated before April 22, 1994 to qualify for less frequent monitoring is governed by the provisions of Paragraph "a.i.(6)", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.H of this Title V operating permit. (b) The Permittee shall monitor all valves at the intervals specified in Paragraphs (c) and (d), Condition H.3.4(7), Table III.H of this Title V operating permit. (1) The valves shall be monitored to detect leaks by using Method 21 of 40 CFR Part 60, Appendix A. Detection instrument shall meet the performance criteria of Method 21 of 40 CFR Part 60. (2) The instrument reading that defines a leak in each phase of the standard is: (i) For Phase I, an instrument reading of 10,000 ppm or greater. (ii) For Phase II, and instrument reading of 500 ppm or greater. (ii) For Phase III, an instrument reading of 500 ppm or greater.	**40 CFR §63.502** **(Subpart H)** 40 CFR §63.168 "*Standards: Valves in Gas/Vapor Service and in Light Liquid Service*"	H.3.4(7)

Section III: Applicable Requirements and Compliance Demonstration

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(c) In Phase III, the Permittee shall monitor valves for leaks at the following intervals: (1) At process units with 2% or greater leaking valves, calculated according to the equation in Paragraph (d), Condition H.3.4(7), Table III.H of this Title V operating permit, the Permittee shall either: (i) Monitor each valve once per month; or (ii) Within the first year after the onset of Phase III, implement a quality improvement program for valves and monitor quarterly. (2) At process units with less than 2% leaking valves, the Permittee shall monitor each valve once each quarter. (3) At process units with less than 1% leaking valves, the Permittee may elect to monitor each valve once every 2 quarters. (4) At process units with less than 0.5% leaking valves, the Permittee may elect to monitor each valve once every 4 quarters. (d) (1) Percent leaking valves at a process unit shall be determined by the following equation: $\% V_L = (V_L / (V_T + V_C)) \times 100$ Where, $\%V_L$ = % leaking valves as determined through periodic monitoring required above V_L = number of valves found leaking excluding non-repairable valves as provided in Paragraph (d)(3)(i), Condition H.3.4(7) of this Title V operating permit. V_T = Total valves monitored, in a monitoring period excluding valves monitored V_C = Optional credit for removed valves = 0.67 x net number (total removed - total added). If credits are not taken V_C = 0. (2) For use in determining monitoring frequency, the percent leaking valves shall be calculated as a rolling average of two consecutive monitoring periods for monthly, quarterly, or semiannual monitoring programs; and as an average of any there out of four consecutive monitoring period for annual monitoring programs. (3) Non-repairable valves shall be included in the calculation of percent leaking valves the first time the valve is identified as leaking and non-repairable and as required to comply with Paragraph (d)(3)(ii), Condition H.3.4(7), Table III.H of this Title V operating permit. Otherwise, a number of non-repairable valves up to a maximum of 1% in organic HAP service at a process unit may be excluded from calculation of percent leaking valves for subsequent monitoring periods. If the number of non-repairable valves exceeds 1% of the total number of valves in organic HAP service at a process unit, the number of non-repairable valves exceeding 1% of the total number of valves shall be included in the calculation of percent leaking valves.	**40 CFR §63.502** **(Subpart H)** 40 CFR §63.168 "*Standards: Valves in Gas/Vapor Service and in Light Liquid Service*"	H.3.4(7) Continued

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(e) (1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Condition H.3.4(10), Table III.H of this Title V operating permit. (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (3) When a leak has been repaired, the valve shall be monitored at least once within the first 3-months after its repair. (i) The monitoring shall be conducted as specified in Paragraph "a", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.B of this Title V operating permit as appropriate, to determine whether the valve has resumed leaking. (ii) Periodic monitoring may be used to satisfy the requirements of Paragraph (e)(3), Condition H.3.4(7), Table III.H of this Title V operating permit if the timing of the monitoring period coincides with the time specified in Paragraph (e)(3), Condition H.3.4(7), Table III.H of this Title V operating permit. Alternatively, other monitoring may be performed to satisfy the requirements regardless of whether the timing of the monitoring period for periodic monitoring coincides with the time specified in Paragraph (e)(3), Condition H.3.4(7), Table III.H of this Title V operating permit. (iii) If a leak is detected by monitoring that is conducted pursuant to this paragraph, the Permittee shall follow the provisions of Paragraphs (e)(3)(iii)(A) and (e)(3)(iii)(B), Condition H.3.4(7), Table III.H of this Title V operating permit to determine whether that valve must be counted as a leaking valve. (A) If the Permittee elected to use periodic monitoring, then the valve shall be counted as a leaking valve. (B) If the Permittee elected to use other monitoring, then the valve shall be counted as a leaking valve unless it is repaired and shown by periodic monitoring not to be leaking. (f) First attempts at repair include, but are no limited to, the following practices where practicable: (1) Tightening of bonnet bolts, (2) Replacement of bonnet bolts, (3) Tightening of packing gland nuts, and (4) Injection of lubricant into lubricated packing. (g) Any valve that is designated as described in Paragraph "b.ii.(7)(A)", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.181(b)(7)(i)), as an unsafe-to-monitor valve is exempt from the requirements of Paragraphs (b) - (e), Condition H.3.4(7), Table III.H of this Title V operating permit if: (1) The Permittee determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Paragraphs (b) - (d), Condition H.3.4(7), Table III.H of this Title V operating permit. (2) The Permittee has a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitoring times.	**40 CFR §63.502** **(Subpart H)** 40 CFR §63.168 "*Standards: Valves in Gas/Vapor Service and in Light Liquid Service*"	H.3.4(7) Continued

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(h) Any valve that is designated, as described in Paragraph "b.ii.(7)(B)", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration , Section III.B of this Title V operating permit as a difficult-to-monitor valve is exempt from the requirements of Paragraphs (b) - (d), Condition H.3.4(7), Table III.H of this Title V operating permit if: (1) The Permittee determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner; (2) The process unit within which the valve is located is an existing source or the Permittee designates less than 3% of the total number of valves in a new source as difficult-to-monitor; and (3) The Permittee follows a written plan that requires monitoring of the valve at least once per calendar year. (i) Any equipment located with fewer than 250 valves in organic HAP service is exempt from the requirements for monthly monitoring and a quality improvement program specified in Paragraph (d)(1), Condition H.3.4(7), Table III.H of this Title V operating permit. Instead, the Permittee shall monitor each valve in organic HAP service for leaks once each quarter, or comply with Paragraph (d)(3) or (d)(4) except as provided in Paragraphs (h) and (i), Condition H.3.4(7), Table III.H of this Title V operating permit.	**40 CFR §63.502 (Subpart H)** 40 CFR §63.168 "*Standards: Valves in Gas/Vapor Service and in Light Liquid Service*"	H.3.4(7) Continued
		(a) Pumps, valves, connectors, and agitators in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and instrumentation systems shall be monitored within 5 calendar days by the method specified in Paragraph "a", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.H of this Title V operating permit if evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method. If such a potential leak is repaired as required in Paragraphs (c) and (d), Condition H.3.4(8), Table III.H of this Title V operating permit, it is not necessary to monitor the system for leaks by the method specified in Paragraph "a", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration , Section III.B of this Title V operating permit: (b) If an instrument reading of 10,000 ppm or greater for agitators, 5,000 ppm or greater for pumps handling polymerizing monomers, 2,000 ppm or greater for pumps subject to Phase III (compliance phase starting March 12, 2002 – see Paragraph (a)(1)(i), Condition H.3.4(7), Table III.H of this Title V operating permit), or 500 ppm or greater for valves, connectors, instrumentation systems, and pressure relief devices is measured, a leak is detected. (c) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected except as provided in Condition H.3.4(10), Table III.H, of this Title V operating permit. (2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (3) For equipment identified in Paragraph (a), Condition H.3.4(8), Table III.H (above) of this Title V operating permit that is not monitored, repaired shall mean that the visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated; that no bubbles are observed at potential leak sites during a leak check using soap solution; or that the system will hold a test pressure. (d) First attempts at repair include, but are not limited, to the practices Paragraph (d), Condition H.3.4(2) and Paragraph (f), Condition H.3.4(7), Table III.H of this Title V operating permit for pumps and valves, respectively.	**40 CFR §63.502 (Subpart H)** 40 CFR §63.169 *"Standards: Pumps, Valves, Connectors, and Agitators in Heavy Liquid Service; Instrumentation Systems, and Pressure Relief Devices in Liquid Service"*	H.3.4(8)

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	The provisions set forth in 40 CFR §63.170 do not apply to surge control vessels and bottoms receivers described in Paragraphs (b)(1) – (b)(6), Condition H.3.4(1) – H.3.4(15), Table III.H of this Title V operating permit in accordance with 40 CFR §63.502(b).	**40 CFR §63.502** (**Subpart H**) 40 CFR §63.170 "*Standards: Surge Control Vessels and Bottoms Receivers*"	H.3.4(9)
		(a) Delay of repair of equipment for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur by the end of the next process unit shutdown. (b) Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in organic HAP service. (c) Delay of repair for valves, connectors, and agitators is also allowed if: (1) The Permittee determines that emissions for purge material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and (2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with Condition H.3.4(11), Table III.H of this Title V operating permit. (d) Delay of repair for pumps is also allowed if: (1) Repair requires replacing the existing seal design with a new system that the Permittee has determined under the provisions of Paragraph (c), Condition H.3.4(15), Table III.H of this Title V operating permit will provide better performance or; (i) A dual mechanical seal system that meets the requirements of Condition H.3.4(2), Table III.H, (ii) A pump that meets the requirements of Condition H.3.4(2), Table III.H, or (iii) A closed-vent system and control device that meets the requirements of Condition H.3.4(2), Table III.H of this Title V operating permit; and (2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected. (e) Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the second process unit shutdown will not be allowed unless the third process unit shutdown occurs sooner than 6 months after the first process unit shutdown.	**40 CFR §502** (**Subpart H**) 40 CFR §63.171 "*Standards: Delay of Repair*"	H.3.4(10)

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(a) Recovery or recapture devices (e.g. condensers and absorbers) shall be designed and operated to recover the organic hazardous air pollutant emissions or VOC emissions vented to them with an efficiency of 95% or greater, or to an exit concentration of 20 ppmv, whichever is less stringent. (b) Enclosed combustion devices shall be designed and operated to reduce the organic hazardous air pollutant emissions or VOC emissions vented to them with an efficiency of 95% or greater, or to an exit concentration of 20 ppmvd, correct to 3% oxygen, whichever is less stringent, or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 ° C. (c) The Permittee shall ensure control devices that are used to comply with the provisions of Conditions H.3.4(1) - H.3.4(15), Table III.H of this Title V operating permit (Subpart H) shall monitor these control devices to ensure that they are operated and maintained in conformance with their design. (d) Except as provided in Paragraphs (h) and (i), Condition H.3.4(11), Table III.H, each closed vent system shall be inspected according to the procedures and schedule in Paragraph (d)(1), Condition H.3.4(11), Table III.H of this Title V operating permit. (1) If the closed-vent system is constructed of hard-piping, the Permittee shall: (i) Conduct an initial inspection according to the procedures in Paragraph (e), Condition H.3.4(11), Table III.H of this Title V operating permit, and (ii) Conduct annual visual inspection for visible, audible, or olfactory indications of leaks. (e) Each closed-vent system shall be inspected according to the procedures in Paragraph "a.ii", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.180(b)). (f) Leaks, as indicated by an instrument reading greater than 500 ppm above background or by visual inspections, shall be repaired as soon as practicable, except as provided in Paragraph (g), Condition H.3.4(11), Table III.H of this Title V operating permit. (1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. (2) Repair shall be completed no later than 15 calendar days after the leak is detected, except as provided in Paragraph (g), Condition H.3.4(11), Table III.H of this Title V operating permit. (g) Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the Permittee determine that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. (h) Any parts of the closed-vent system that are designated, as described in Paragraph "b.ii.(7)(A)", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.H (40 CFR §63.181(b)(7)(i)) of this Title V operating permit, as unsafe to inspect are exempt from the inspection requirements of Paragraph (d)(1), Condition H.3.4(11), Table III.H of this Title V operating permit if: (1) The Permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger; and	**40 CFR §63.502** (**Subpart H**) 40 CFR §63.172 "*Standards: Closed-vent Systems and Control Devices*"	H.3.4(11)

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(2) The Permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times, but not more frequently than annually. (i) Any parts of the closed-vent system that are designated, as described in Paragraph "b.ii.(7)(A)", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.181(b)(7)(i)), as difficult to inspect are exempt from the inspection requirements of Paragraph (d)(1), Condition H.3.4(11), Table III.H of this Title V operating permit if: (1) The Permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and (2) The Permittee has a written plan that requires inspection of the equipment at least once every 5 years. (j) Whenever organic HAP emissions are vented to a closed-vent system or control device used to comply with the provisions of Conditions H.3.4(1) - H.3.4(15), Table III.H of this Title V operating permit (Subpart H), such system or control device shall be operating.	**40 CFR §63.502** (**Subpart H**) 40 CFR §63.172 "*Standards: Closed-Vent Systems and Control Devices*"	H.3.4(11) Continued
		(a) (1) Each agitator shall be monitored monthly to detect leaks by the methods specified in Paragraph "a.ii", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.H of this Title V operating permit (40 CFR §63.180(b)). (2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. (b) (1) Each agitator shall be checked by visual inspection each calendar week for indications of liquids dripping from the agitator. (2) If there are indications of liquids dripping from the agitator, a leak is detected. (c) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected except as provided in Condition H.3.4(10), Table III.H of this Title V operating permit (40 CFR §63.171). (2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (d) Each agitator equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of Paragraph (a), Condition H.3.4(12), Table III.H of this Title V operating permit, provided the requirements specified in Paragraphs (d)(1) - (d)(6), Condition H.3.4(12), Table III.H of this Title V operating permit are met: (1) Each dual mechanical seal system is operated with the barrier fluid at a pressure that is at all times greater than the agitator stuffing box pressure; or equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of Condition H.3.4(11), Table III.H of this Title V operating permit (40 CFR §63.172).	**40 CFR §63.502** (**Subpart H**) 40 CFR §63.173 "*Standards: Agitators in Gas/Vapor Service and in Light Liquid Service*"	H.3.4(12)

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(i) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of Condition H.3.4(11), Table III.H of this Title V operating permit (40 CFR §63.172). (2) The barrier fluid is not in light liquid organic HAP service. (3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both. (4) Each agitator is checked by visual inspection each calendar week for indications of liquids dripping from the agitator seal. (i) If there are indications of liquids dripping from the agitator seal at the time of the weekly inspection, the agitator shall be monitored as specified in Paragraph "a.ii", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.180(b)) to determine the presence of organic HAP in the barrier fluid. (ii) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. (5) Each sensor is observed daily or is equipped with an alarm unless the agitator is located within the boundary of an unmanned plant site. (6) (i) The Permittee determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both. (ii) If indications of liquids dripping from the agitator seal exceed the criteria established in Paragraph (d)(6)(i), Condition H.3.4(12), Table III.H, or if based on the criteria established in Paragraph (d)(6)(i) Condition H.3.4(12), Table III.H of this Title V operating permit, the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected. (iii) A first attempt at repair shall be made no later than 5 calendar days after it is detected, except as provided in Condition H.3.4(10), Table III.H of this Title V operating permit (40 CFR §63.171). (iv) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (e) Any agitator that is designed with no externally actuated shaft penetrating the agitator housing is exempt from Paragraphs (a) - (c), Condition H.3.4(12), Table III.H of this Title V operating permit. (f) Any agitator equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a process or fuel gas system or to a control device that complies with the requirements of Condition H.3.4(11), Table III.H of this Title V operating permit (40 CFR §63.172) is exempt from the requirements of Paragraphs (a) - (c), Condition H.3.4(12), Table III.H of this Title V operating permit.	**40 CFR §63.502** (**Subpart H**) 40 CFR §63.173 "*Standards: Agitators in Gas/Vapor Service and in Light Liquid Service*"	H.3.4(12) Continued

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**
- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(g) Any agitator that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of Paragraphs (b)(1) and (d)(4), Condition H.3.4(12), Table III.H, and the daily requirements of Paragraph (d)(5), Condition H.3.4(12), Table III.H of this Title V operating permit, provided that each agitator is visually inspected as often as practical and at least once monthly. (h) Any agitator that is difficult-to-monitor is exempt from the requirements of Paragraphs (a) - (d), Condition H.3.4(12), Table III.H of this Title V operating permit if: (1) The Permittee determines that the agitator cannot be monitored without elevating the monitoring personnel more than two meters above a support surface or it is not accessible at anytime in a safe manner; (2) The process unit within which the agitator is located is an existing source or the Permittee designates less than 3% of the total number of agitators in a new source as difficult-to-monitor; and (3) The Permittee follows a written plan that requires monitoring of the agitator at least once per calendar year. (i) Any agitator that is obstructed by equipment or piping that prevents access to the agitator by a monitor probe is exempt from the monitoring requirements of Paragraphs (a) - (d), Condition H.3.4(12), Table III.H of this Title V operating. (j) Any agitator that is designated, as an unsafe-to-monitor agitator (described in Paragraph "b.ii.(7)(A)", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.181(b)(7)(i)) is exempt from the requirements of Paragraphs (a) - (d), Condition H.3.4(12), Table III.H of this Title V operating if: (1) The Permittee determines that the agitator is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Paragraphs (a) - (d), Condition H.3.4(12), Table III.H of this Title V operating. (2) The Permittee has a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitoring times.	**40 CFR §63.502** (**Subpart H**) 40 CFR §63.173 "*Standards: Agitators in Gas/Vapor Service and in Light Liquid Service*"	H.3.4(12) Continued
		(a) The Permittee shall monitor all connectors in gas/vapor and light liquid service, at the intervals specified in Paragraph (b), Condition H.3.4(13), Table III.H of this Title V operating permit. (1) The connectors shall be monitored to detect leaks by the method specified in Paragraph "a.ii", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.H of this Title V operating permit (40 CFR §63.180(b)). (2) If an instrument reading of 5,000 ppm or greater is measured, a leak is detected. (b) The Permittee shall monitor for leaks at the intervals specified in either Paragraph (b)(1) or (b)(2) and in Paragraph (b)(3), Condition H.3.4(13), Table III.H of this Title V operating permit. (1) For each group of existing process units within an existing source, by no later than 12 months after the compliance date, the Permittee shall monitor all connectors, except as provided in Paragraphs (f) - (h), Condition H.3.4(13), Table III.H of this Title V operating permit. (2) For new sources, within the first 12 months after initial start-up or by no later than 12 months after the date of promulgation of a specific subpart that references Subpart H, whichever is later, the Permittee shall monitor all connectors except as provided in Paragraphs (f) - (h), Condition H.3.4(13), Table III.H of this Title V operating permit.	**40 CFR §63.502** (**Subpart H**) 40 CFR §63.174 "*Standards: Connectors in Gas/Vapor Service and in Light Liquid Service*"	H.3.4(13)

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(3) After conducting the initial survey required in Paragraph (b)(1) or (b)(2), Condition H.3.4(13), Table III.H, the Permittee shall perform all subsequent monitoring of connectors at the frequencies specified in Paragraphs (b)(3)(i) - (b)(3)(v), Condition H.3.4(13), Table III.H except as provided in Paragraph (c)(2), Condition H.3.4(13), Table III.H of this Title V operating permit: (i) Once per year (i.e., 12-month period), if the percent leaking connectors in the process unit was 0.5% or greater during the last required annual or biennial monitoring period. (ii) Once every 2 years, if the percent leaking connectors was less than 0.5% during the last required monitoring period. The Permittee may comply with this paragraph by monitoring at least 40% of the connectors in the first year and the remainder of the connectors in the second year. The percent leaking connectors will be calculated for the total of all monitoring performed during the 2-year period. (iii) If the Permittee calculates less than 0.5% leaking connectors from a process unit in a biennial leak detection and repair program from the 2-year monitoring period, the Permittee may monitor the connectors one time every 4 years. The Permittee may comply with this paragraph by monitoring at least 20% of the connectors each year until all connectors have been monitored within 4 years. (iv) If a process unit complying with the requirements of Paragraph (b), Condition H.3.4(13), Table III.H of this Title V operating permit using a 4-year monitoring interval program has greater than or equal to 0.5% but less than 1% leaking connectors, the Permittee shall increase the monitoring frequency to one time every 2 years. The Permittee may comply with this paragraph by monitoring at least 40% of the connectors in the first year and the remainder of the connectors in the second year. The percent leaking connectors will be calculated for the total of all monitoring performed during the 2-year period. (v) If the process unit using a 4-year monitoring interval program has 1% or greater leaking connectors, the Permittee shall increase the monitoring frequency to one time per year. (c) (1) (i) Except as provided in Paragraph (c)(1)(i), Condition H.3.4(13), Table III.H of this Title V operating permit, each connector that has been opened or has otherwise had the seal broken shall be monitored for leaks when it is reconnected or within the first 3 months after being returned to organic HAP service. If the monitoring detects a leak, it shall be repaired according to the provisions of Paragraph (d), Condition H.3.4(13), Table III.H, unless it is determined to be non-repairable, in which case it is counted as a non-repairable connector for the purposes of Paragraph (i)(2), Condition H.3.4(13), Table III.H of this Title V operating permit. (ii) As an alternative to the requirements in Paragraph (c)(1)(i), Condition H.3.4(13), Table III.H of this Title V operating permit, the Permittee may choose not to monitor connectors that have been opened or otherwise had the seal broken. In this case, the Permittee may not count non-repairable connectors for the purpose of Paragraph (i)(2), Condition H.3.4(13), Table III.H of this Title V operating permit.	**40 CFR §63.502** (**Subpart H**) 40 CFR §63.174 "*Standards: Connectors in Gas/Vapor Service and in Light Liquid Service*"	H.3.4(13) Continued

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	The Permittee shall calculate the percent leaking connectors for the monitoring period described in Paragraph (b), Condition H.3.4(13), Table III.H, by setting the non-repairable component, C_{AN}, in the equation in Paragraph (h)(2), Condition H.3.4(13), Table III.H of this Title V operating permit to zero for all monitoring periods. (2) As an alternative to Paragraph (b)(3), Condition H.3.4(13), Table III.H, each screwed connector 2 inches or less in nominal inside diameter installed in a process unit before the date specified in Paragraph (c)(2)(iii) or (c)(2)(iv), Condition H.3.4(13), Table III.H of this Title V operating permit may: (i) Comply with the requirements of Condition H.3.4(8), Table III.H (40 CFR §63.169), and (ii) Be monitored for leaks within the first 3 months after being returned to organic HAP service after having been opened or otherwise had the seal broken. If that monitoring detects a leak, it shall be repaired according to the provisions of Paragraph (d), Condition H.3.4(13), Table III.H of this Title V operating permit. (ii) For sources subject to 40 CFR Part 63 Subpart JJJ, the provisions of Paragraph (c)(2), Condition H.3.4(13), Table III.H of this Title V operating permit apply to screwed connectors installed before December 31, 1992. (iv) For sources not identified, the provisions of Paragraph (c)(2), Condition H.3.4(13), Table III.H of this Title V operating permit apply to screwed connectors installed before the date of proposal of the applicable subpart of this part that references Subpart H. (d) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Paragraph (g), Condition H.3.4(13), and in Condition H.3.4(10), Table III.H (40 CFR §63.171). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. (e) Any connector that is designated, as described in Paragraph "b.ii.(7)(A)", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.181(b)(7)(i)) as an unsafe-to-monitor connector is exempt from the requirements of Paragraph (a), Condition H.3.4(13), Table III.H of this Title V operating permit if: (1) The Permittee determines that the connector is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Paragraphs (a) - (d), Condition H.3.4(13), Table III.H of this Title V operating permit. (2) The Permittee has a written plan that requires monitoring of the connector as frequently as practicable during safe-to-monitoring times. The Permittee follows a written plan that requires monitoring of the connector at least once per calendar year. (f) Any connector that is designated, as described in Paragraph "b.ii.(7)(C)", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.B of this Title V operating permit as an unsafe-to-repair connector is exempt from the requirements of Paragraphs (a), (b), and (d), Condition H.3.4(13), Table III.H of this Title V operating permit if: (1) The Permittee determines that repair personnel would be exposed to an immediate danger as a consequence of complying with Paragraph (d), Condition H.3.4(13), Table III.H of this Title V operating permit; and (2) The connector will be repaired before the end of the next scheduled process unit shutdown.	**40 CFR §63.502** **(Subpart H)** 40 CFR §63.174 "*Standards: Connectors in Gas/Vapor Service and in Light Liquid Service*"	H.3.4(13) Continued

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. or Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(g) (1) Any connector that is inaccessible or is ceramic or ceramic-lined, is exempt from the monitoring requirements of Paragraphs (a) and (c), Condition H.3.4(13), Table III.H and from the record keeping and reporting requirements of Paragraphs "b" and "c", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §§63.181 and 63.182). An inaccessible connector is one that is: (i) Buried; (ii) Insulated in a manner that prevents access to the connector by a monitor probe; (iii) Obstructed by equipment or piping that prevents access to the connector by a monitor probe; (iv) Unable to be reached from a wheeled scissors-lift or hydraulic-type scaffold which would allow access to connectors up to 7.6 meters (25 feet) above the ground; (v) Inaccessible because it would require elevating the monitoring personnel more than 2 meters above a permanent support surface or would require the erection of scaffold; or (vi) Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissors-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment. (2) If any inaccessible or ceramic or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the leak shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Condition H.3.4(10), Table III.H (40 CFR §63.171) and Paragraph (g), Condition H.3.4(13), Table III.H of this Title V operating permit. (3) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. (h) For use in determining the monitoring frequency, as specified in Paragraph (b), Condition H.3.4(13), Table III.H, the percent leaking connectors shall be calculated as specified in Paragraphs (h)(1) and (h)(2), Condition H.3.4(13), Table III.H of this Title V operating permit. (1) For the first monitoring period, use the following equation: $\% C_L = C_L / (C_T + C_C) \times 100$ Where: $\% C_L$ = Percent leaking connectors as determined through periodic monitoring required in Paragraphs (a) and (b), Condition H.3.4(13), Table III.H of this Title V operating permit. C_L = Number of connectors measured at 500 ppm or greater, by the method specified in Paragraph "a.ii", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.180(b)) C_T = Total number of monitored connectors in the process unit. C_C = Optional credit for removed connectors = 0.67 x net (i.e. total removed - total added) number of connectors in organic HAP service removed from the process unit after the compliance date. If credits are not taken, $C_C = 0$.	**40 CFR §63.502** **(Subpart H)** 40 CFR §63.174 "*Standards: Connectors in Gas/Vapor Service and in Light Liquid Service*"	H.3.4(13) Continued

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(2) For subsequent monitoring periods, use the following equation: $\% C_L = [(C_L - C_{AN})/ (C_T + C_C)] \times 100$ Where: $\% C_L$ = Percent leaking connectors as determined through periodic monitoring required in Paragraphs (a) and (b), Condition H.3.4(13), Table III.H of this Title V operating permit. C_L = Number of connectors measured at 500 ppm or greater, by the method specified in Paragraph "a.ii", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.180(b)) C_{AN} = Number of allowable non-repairable connectors, as determined by monitoring required in Paragraphs (b)(3) and (c), Condition H.3.4(13), Table III.H of this Title V operating permit, not to exceed 2% of the total connector population, C_T. C_T = Total number of monitored connectors in the process unit. C_C = Optional credit for removed connectors = 0.67 x net (i.e. total removed - total added) number of connectors in organic HAP service removed from the process unit after the compliance date. If credits are not taken, $C_C = 0$. (i) If the Permittee eliminates a connector subject to monitoring under Paragraph (b), Condition H.3.4(13), Table III.H, the Permittee may receive credit for elimination of the connector, as described in Paragraph (i), Condition H.3.4(13), Table III.H, provided the requirements in Paragraph (i)(1) - (i)(4), Condition H.3.4(13), Table III.H of this Title V operating permit are met. (1) The connector was welded after the date of proposal of 40 CFR Part 63, Subpart JJJ. (2) The integrity of the weld is demonstrated by monitoring it according to the procedures in Paragraph "a.ii", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.H of this Title V operating permit (40 CFR §63.180(b)) by testing using X-ray, acoustic monitoring, hydro-testing, or other applicable method. (3) Welds created after the date of proposal but before the date of promulgation (40 CFR Part 63, Subpart JJJ) are monitored or tested by 3 months after the compliance date. (4) Welds created after promulgation of 40 CFR Part 63, Subpart JJJ are monitored or tested within 3 months after being welded. (5) If an inadequate weld is found or the connector is not welded completely around the circumference, the connector is not considered a welded connector and is not exempt from the provisions of Conditions H.3.4(1) - H.3.4(15), Table III.H of this Title V operating permit (Subpart H).	**40 CFR §63.502** (**Subpart H**) 40 CFR §63.174 "*Standards: Connectors in Gas/Vapor Service and in Light Liquid Service*"	H.3.4(13) Continued

H. GEU-016 - Latex Production:

- **EU-016A - EU-016AA - Reactors, Supporting Equipment, and Scrubber; EU-016BB - Butadiene Storage Sphere**
- **EU-016CC - Acrylic Acid Tank; EU-016DD - Tertiary-Dodecyl-Mercaptan Tank**
- **EU-016EE - Ammonium Hydroxide Storage Tank; EU-016FF - Hydroxyl-Ethyl-Acrylate Tank**

- **Applicable Requirements**

Table III.H: Applicable Requirements GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(a) In Phase III (compliance phase starting March 12, 2002), the Permittee may elect to comply with one of the alternative quality improvement programs specified in Paragraphs (d) and (e), Condition H.3.4(14), Table III.H of this Title V operating permit. The decision to use one of these alternative provisions to comply with the requirements of Paragraph (c)(1)(ii), Condition H.3.4(7), Table III.H of this Title V operating permit (40 CFR §63.168(d)(1)(ii)) must be made during the first year of Phase III for existing process units and for new process units. (b) A process unit subject to the requirements of Paragraph (d) or (e), Condition H.3.4(14), Table III.H of this Title V operating permit shall comply with those requirements until the process unit has fewer than 2% leaking valves, calculated as a rolling average of 2 consecutive quarters, as specified in Paragraph (d), Condition H.3.4(7), Table III.H of this Title V operating permit (40 CFR §63.168(e)). (c) After the process unit has fewer than 2% leaking valves, the Permittee may elect to comply with the requirements in Condition H.3.4(7), Table III.H (40 CFR §63.168), to continue to comply with the requirements in Paragraph (d) or (e) if appropriate of this Condition H.3.4(14), Table III.H, or comply with both requirements in Conditions H.3.4(7) and H.3.4(14), Table III.H of this Title V operating permit (40 CFR §§63.168 and 63.175). (1) If the Permittee elects to continue the quality improvement program, the Permittee is exempt from the requirements for further progress as specified in Paragraph (d)(4), Condition H.3.4(14), Table III.H, as long as the process unit has fewer than 2 % leaking valves calculated according to Paragraph (d), Condition H.3.4(7), Table III.H of this Title V operating permit (40 CFR §63.168(e)). (2) If the Permittee elects to comply with both Paragraph (e), Condition H.3.4(14), Table III.H and Condition H.3.4(7), Table III.H (40 CFR §63.168), the Permittee may also take advantage of the lower monitoring frequencies associated with lower leak rates in Paragraphs (c)(2), (c)(3), and (c)(4), Condition H.3.4(7), Table III.H of this Title V operating permit (40 CFR §§63.168(d)(2), (d)(3), and (d)(4)). (3) If the Permittee elects not to continue the quality improvement program, the program is no longer an option if the process unit again exceeds 2% leaking valves, and in such case, monthly monitoring will be required. (d) The following requirements shall be met if the Permittee elects to use a quality improvement program to demonstrate further progress: (1) The Permittee shall continue to comply with the requirements in Condition H.3.4(8), Table III.H of this Title V operating permit (40 CFR §63.169) except each valve shall be monitored quarterly. (2) The Permittee shall collect the following data, and maintain records as required in Paragraph "b.viii.(1)", Condition H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.B of this Title V operating permit (40 CFR §63.181(h)(1)), for each valve in each process unit subject to the quality improvement program:	**40 CFR §63.502** (**Subpart H**) 40 CFR §63.175 "*Standards: Quality Improvement Program for Valves*"	H.3.4(14)

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(i) The maximum instrument reading observed in each monitoring observation before repair, the response factor for the stream if appropriate, the instrument model number, and date of the observation. (ii) Whether the valve is in gas or light liquid service. (iii) If a leak is detected, the repair methods used and the instrument readings after repair. (3) The Permittee shall continue to collect data on the valves as long as the process unit remains in the quality improvement program. (4) The Permittee must demonstrate progress in reducing the percent leaking valves each quarter the process unit is subject to the requirements of Paragraph (d), Condition H.3.4(14), Table III.H except as provided in Paragraphs (d)(4)(ii) and (d)(4)(iii), Condition H.3.4(14), Table III.H of this Title V operating permit. (i) Demonstration of progress shall mean that for each quarter there is at least a 10% reduction in the percent leaking valves from the percent leaking valves determined for the preceding monitoring period. The percent leaking valves shall be calculated as a rolling average of two consecutive quarters of monitoring data. The percent reduction shall be calculated using the rolling average percent leaking valves, according to the following: $\%LV_R = (\%LV_{AVG1} - \%LV_{AVG2}) / \%LV_{AVG1} \times 100$ Where, $\%LV_R$ = Percent leaking valve reduction. $\%LV_{AVG1} = (\%V_{Li} + \%V_{Li+1}) / 2$ $\%LV_{AVG2} = (\%V_{Li+1} + \%V_{Li+2}) / 2$ $\%V_{Li}$, $\%V_{Li+1}$, $\%V_{Li+2}$ are percent leaking valves calculated for subsequent monitoring periods, i, i + 1 and i + 2. (ii) The Permittee who fails for two consecutive rolling averages to demonstrate at least a 10% reduction per quarter in percent overall average percent reduction based on two or more rolling averages is less than 10% per quarter, shall either comply with the requirements in Paragraph (c)(1)(i), Condition H.3.4(7), Table III.H (40 CFR §63.168(d)(1)(i)) using monthly monitoring or shall comply using a quality improvement program for technology review as specified in Paragraph (e), Condition H.3.4(14), Table III.H, the schedule for performance trials and valve replacements remains as specified in Paragraph (e), Condition H.3.4(14), Table III.H of this Title V operating permit. (iii) As an alternative to the provisions in Paragraph (d)(4)(i), Condition H.3.4(14), Table III.H, the Permittee may use the procedure specified in Paragraphs (d)(4)(iii)(A) and (d)(4)(iii)(B), Condition H.3.4(14), Table III.H of this Title V operating permit to demonstrate progress in reducing the percent leaking valves. (A) The percent leaking reduction that must be achieved each quarter shall be calculated as follows:	**40 CFR §63.502** (**Subpart H**) 40 CFR §63.175 "*Standards: Quality Improvement Program for Valves*"	H.3.4(14) Continued

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	$\%RR = (\%V_L - 2\%) / 0.10$ Where, %RR = percent reduction required each quarter, as calculated according to Paragraph (d), Condition H.3.4(7), Table III.H of this Title V operating permit (40 CFR §63.168(e)). $\%V_L$ = percent leaking valves, calculated according to Paragraph (d), Condition H.3.4(7), Table III.H of this Title V operating permit (40 CFR §63.168(e)). (B) The Permittee shall achieve less than 2% leaking valves no later than 2 years after electing to use the demonstration of progress provisions in Paragraph (d), Condition H.3.4(14), Table III.H of this Title V operating permit (40 CFR §63.175(d)). (e) The following requirements shall be met if the Permittee elects to use a quality improvement program of technology review and improvements: (1) The Permittee shall comply with the requirements in Condition H.3.4(7), Table III.H of this Title V operating permit (40 CFR §63.168) except the requirements for monthly monitoring in Paragraph (c)(1)(i), Condition H.3.4(7), Table III.H of this Title V operating permit (40 CFR §63.168(d)(1)(i)) does not apply. (2) The Permittee shall collect the data specified below, and maintain records as required in Paragraph "b.viii.(2)", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.H of this Title V operating permit (40 CFR §63.181(h)(2)), for each valve in each process unit subject to the quality improvement program. The data may be collected and the records may be maintained on a process unit or group of process units basis. The data shall include the following: (i) Valve type (e.g. ball, gate, check); valve manufacturer; valve design (e.g. external stem or actuating mechanism, flanged body); materials of construction; packing material; and year installed. (ii) Service characteristics of the stream such as operating pressure, temperature, line diameter, and corrosivity. (iii) Whether the valve is in gas or light liquid service. (iv) The maximum instrument readings observed in each monitoring observation before repair, response factor for the stream if adjusted, instrument model number. (v) If a leak is detected, the repair methods used and the instrument readings after repair. (vi) If the data will be analyzed as part of a larger analysis program involving data from other plants or other types of process units, a description of any maintenance or quality assurance programs used in the process unit that are intended to improve emissions performance. (3) The Permittee shall continue to collect data on the valves as long as the process unit remains in the quality improvement program.	**40 CFR §63.502** (**Subpart H**) 40 CFR §63.175 "*Standards: Quality Improvement Program for Valves*"	H.3.4(14) Continued

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(4) The Permittee shall inspect all valves removed from the process unit due to leaks. The inspection shall determine which parts of the valve have failed and shall include recommendations, as appropriate, for design changes or changes in specifications to reduce leak potential. (k) (i) The Permittee shall analyze the data collected to comply with the requirements of Paragraph (e)(2), Condition H.3.4(14), Table III.H of this Title V operating permit to determine the services, operating or maintenance practices, and valve designs or technologies that have poorer than average emission performance and those that have better than average emission performance. The analysis shall determine if specific trouble areas can be identified on the basis of service, operating conditions or maintenance practices, equipment design, or other process specific factors. (ii) The analysis shall also be used to identify any superior performing valve technologies that are applicable to the services, operating conditions, or valve designs associated with poorer than average emission performance. A superior performing valve technology is one for which a group of such valves has a leak frequency of less than 2% for specific applications in such a process unit. A candidate superior performing valve technology is one demonstrated or reported in the available literature or through a group study as having low emission performance and as being capable of achieving less than 2% leaking valves in the process unit.	**40 CFR §63.502** **(Subpart H)** 40 CFR §63.175 *"Standards: Quality Improvement Program for Valves"*	H.3.4(14) Continued
		(a) In Phase III (compliance phase starting March 12, 2002), if, on a 6-month rolling average, the greater of either 10% of the pumps in a process unit (or plant site) or three pumps in a process unit (or plant site) leak, the Permittee shall comply with the requirements as specified below in Paragraph (a), Condition H.3.4(15), Table III.H of this Title V operating permit (40 CFR 63.176(a)): (1) Pumps that are in polymerizing monomer service shall comply with all requirements except for those specified in Paragraph (d)(8), Condition H.3.4(15), Table III.H of this Title V operating permit (40 CFR §63.176(a)). (2) Pumps that are not in polymerizing monomer service shall comply with all requirements of Condition H.3.4(15), Table III.H of this Title V operating permit (40 CFR §63.176). (b) The Permittee shall comply with the requirements of this section until the number of leaking pumps is less than the greater of either 10% of the pumps or three pumps, calculated as a 6-month rolling average, in the process unit (or plant site). Once the performance level is achieved, the Permittee shall comply with the requirements in Condition H.3.4(2), Table III.H of this Title V operating permit (40 CFR §63.163). (c) If in a subsequent monitoring period, the process unit (or plant site) has greater than 10% of the pumps leaking or three pumps leaking (calculated as a 6-month rolling average), the Permittee shall resume the quality improvement program starting at performance trials.	**40 CFR §63.502** **(Subpart H)** 40 CFR §63.176 *"Standards: Quality Improvement Program for Pumps"*	H.3.4(15)

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(d) The quality improvement program shall include the following: (1) The Permittee shall comply with the requirements in Condition H.3.4(2), Table III.H of this Title V operating permit (40 CFR §63.163). (2) The Permittee shall collect the following data, and maintain records as required in Paragraph "b.viii.(3)", Conditions H.3.4(1) - H.3.4(15), Section III.H of this Title V operating permit (40 CFR §63.181(h)(3)), for each pump in each process unit (or plant site) subject to the quality improvement program. The data may be collected and the records may be maintained on a process unit or plant site basis and includes the following: (i) Pump type (e.g. piston, horizontal or vertical centrifugal, gear, bellows); pump manufacturer; seal type and manufacturer; pump design (e.g. external shaft, flanged body); materials of construction; if applicable, barrier fluid or packing material, and year installed. (ii) Service characteristics of the stream such as discharge pressure, temperature, flow rate, corrosivity, and annual operating hours. (iii) The maximum instrument readings observed in each monitoring observation before repair, response factor for the stream if appropriate, instrument model number, and date of the observation. (iv) If a leak is detected, the repair methods used and the instrument readings after repair. (iv) If the data will be analyzed as part of a larger analysis program involving data from other plants or other types of process units, a description of any maintenance or quality assurance programs used in the process unit that are intended to improve emission performance. (3) The Permittee shall continue to collect data on the pumps as long as the process unit (or plant site) remains in the quality improvement program. (4) The Permittee shall inspect all pumps or pumps seals which exhibited frequent seal failures and were removed from the process unit due to leaks. The inspection shall determine the probable cause of the pump seal failure or of the pump leak and shall include recommendations, as appropriate, for design changes or change in specification to reduce leak potential. (5) (i) The Permittee shall analyze the data collected to comply with the requirements of Paragraph (d)(2), Condition H.3.4(15), Table III.H of this Title V operating permit (40 CFR §63.176) to determine the services, operating or maintenance practices, and pump or pump seal designs or technologies that have poorer than average emissions performance and those that have better than average emissions performance. The analysis shall determine if specific trouble areas can be identified on the basis of service, operating conditions or maintenance practices, equipment design, or other process specific factors. (ii) The analysis shall also be used to determine if there are superior performing pump or pump seal technologies that are applicable to the services, operating conditions, or pump or pump seal designs associated with poorer than average emissions performance. A superior performing pump or pump seal technology is one with a leak frequency of less than 10% for specific applications in the process unit or plant site.	**40 CFR §63.502** **(Subpart H)** 40 CFR §63.176 "*Standards: Quality Improvement Program for Pumps*"	H.3.4(15) Continued

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	The analysis shall also be used to determine if there are superior performing pump or pump seal technologies that are applicable to the services, operating conditions, or pump or pump seal design associated with poorer than average emissions performance. A superior performing pump or pump seal technology is one with a leak frequency of less than 10% for specific applications in the process unit or plant site. A candidate superior performing pump or pump seal technology is one demonstrated or reported in the available literature or through a group sturdy as having low emissions performance and as being capable of achieving less than 10% leaking pumps in the process unit (or plant site). The analysis shall include consideration of: (A) The data obtained from the inspections of pumps and pump seals removed from the process unit due to leaks; (B) Information from available literature and from the experience of other plant sites that will identify pump designs or technologies and operating conditions associated with low emissions performances for specific services; and (C) Information on limitations on the service conditions for the pump seal technology operating conditions as well as information on maintenance procedures to ensure continued low emissions performance. (iii) The data analysis may be conducted through an inter- or intra-company program (or through some combination of the two approaches) and may be for a single process unit, a plant site, a company, or a group of process units. (iv) The first analysis of the data shall be completed no later than 18 months after the start of the quality improvement program. The first analysis shall be performed using a minimum of 6 months of data. An analysis of the data shall be done each year the process unit is in the quality improvement program. (6) A trial evaluation program shall be conducted at each plant site for which the data analysis does not identify use of superior performing pump seal technology or pumps that can be applied to the areas identified as having poorer than average performance, except as provided in Paragraph (d)(6)(v), Condition H.3.4(15), Table III.H of this Title V operating permit. The trial program shall be used to evaluate the feasibility of using in the process unit (or plant site) the pump designs or seal technologies, and operating and maintenance practices that have been identified by others as having low emission performance.	**40 CFR §63.502** (**Subpart H**) 40 CFR §63.176 "*Standards: Quality Improvement Program for Pumps*"	H.3.4(15) Continued

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(i) The trial program shall include on-line trials of pump seal technologies or pump designs and operating and maintenance practices that have been identified in the available literature or in analysis by others as having the availability to perform with leak rates below 10% in similar services, as having low probability of failure, or as having no external actuating mechanism in contact with the process fluid. If any of the candidate superior performing pump seal technologies or pumps is not included in the performance trials, the reasons for rejecting specific technologies from consideration shall be documented as required in Paragraph "b.viii.(5)(B)", Conditions H.3.4(1) - H.3.4(15), Compliance Demonstration, Section III.H of this Title V operating permit (40 CFR §63.181(h)(5)(ii)). (ii) The number of pump seal technologies or pumps in the trial evaluation program shall be the lesser of 1% or two pumps for programs involving single process units and the lesser of 1% or five pumps for programs involving a plant site or groups of process units. The minimum number of pumps or pump seal technologies in a trial program shall be one. (iii) The trial evaluation program shall specify and include documentation of: (A) The candidate superior performance pump seal designs or technologies to be evaluated, the stages for evaluating the identified candidate pump designs or pump seal technologies, including the time period necessary to test the applicability; (B) The frequency of monitoring or inspection of the equipment; (C) The range of operating conditions over which the component will be evaluated; and (D) Conclusions regarding the emissions performance and the appropriate operating conditions and services for the trial pump seal technologies or pumps. (iv) The performance trials shall initially be conducted, at least, for a 6-month period beginning not later than 18 months after the start of the quality improvement program. No later than 24 months after the start of the quality improvement program, the Permittee shall have identified pump seal technologies or pump designs that, combined with appropriate process, operating, and maintenance practices, operate with low emissions performance for specific applications in the process unit. The Permittee shall continue to conduct performance trials as long as no superior performing design or technology has been identified, except as provided in Paragraph (d)(6)(vi), Condition H.3.4(15), Table III.H of this Title V operating permit. The initial list of superior emissions performance pump designs or pump seal technologies shall be amended in the future, as appropriate, as additional information and experience is obtained. (v) Any plant site with fewer than 400 valves and owned by a corporation with fewer than 100 employees shall be exempt from trial evaluations of pump seals or pump designs. Plant sites exempt from the trial evaluations of pumps shall begin the pump seal or pump replacement program at the start of the fourth year of the quality improvement program. (vi) The Permittee who has conducted performance trials on all alternative superior emissions performance technologies suitable for the required applications in the process unit may stop conducting performance	**40 CFR §63.502** (**Subpart H**) 40 CFR §63.176 "*Standards: Quality Improvement Program for Pumps*"	H.3.4(15) Continued

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	trials provided that a superior performance design or technology has been demonstrated or there are no technically feasible alternative superior technologies remaining. The permittee shall prepare an engineering evaluation documenting the physical, chemical, or engineering basis for the judgement that the superior emissions performance technology is technically infeasible or demonstrating that it would not reduce emissions. (7) The Permittee shall prepare and implement a pump quality assurance program that details purchasing specifications and maintenance procedures for all pumps and pump seals in the process unit. The quality assurance program may establish any number of categories, or classes, of pumps as needed to distinguish among operating conditions and services associated with poorer than average emissions performance as well as those associated with better than average emissions performance. The quality assurance program shall be developed considering the findings of the data analysis required under Paragraph (d)(5), Condition H.3.4(15), Table III.H, if applicable, the findings of the trial evaluation required in Paragraph (d)(6), Condition H.3.4(15), Table III.H of this Title V operating permit, and the operating conditions in the process unit. The quality assurance program shall be updated each year as long as the process unit has the greater of either 10% or more leaking pumps or has three leaking pumps. (i) The quality assurance program shall: (A) Establish minimum design standards for each category of pumps or pump seal technology. The design standards shall specify known critical parameters such as tolerance, manufacturer, materials of construction, previous usage, or other applicable identified critical parameters; (B) Require that all equipment orders specify the design standard (or minimum tolerances) for the pump or the pump seal; (C) Provide for an audit procedure for quality control of purchased equipment to ensure conformance with purchase specifications. The audit program may be conducted by the Permittee or by a designated representative; and (D) Detail off-line pump maintenance and repair procedures. These procedures shall include provisions to ensure that rebuilt or refurbished pumps and pump seals will meet the design specifications for the pump category and will operate such that emissions are minimized. (ii) The quality assurance program shall be established no later than the start of the third year of the quality improvement program for plant sites with 400 or more valves or 100 or more employees; and no later than the start of the fourth year of the quality improvement program for plant sites with less than 400 valves and 100 employees.	**40 CFR §63.502** (**Subpart H**) 40 CFR §63.176 "*Standards: Quality Improvement Program for Pumps*"	H.3.4(15) Continued

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **APPLICABLE REQUIREMENTS**

TABLE III.H: APPLICABLE REQUIREMENTS GEU-001, GEU-002, GEU-003

Pollutant or Process Parameter	Emissions Unit No. & Plant	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
HAP (Federal)	GEU-016	(8) Beginning at the start of the third year of the quality improvement program for sites with 400 or more valves or 100 or more employees and at the start of the fourth year of the quality improvement program for plant sites with less than 400 valves and less than 100 employees, the Permittee shall replace as describe in Paragraphs (d)(8)(i) and (d)(8)(ii), Condition H.3.4(15), Table III.H of this Title V operating permit, the pumps or pump seals that are not superior emissions performance technology with pumps or pump seals that have been identified as superior emissions performance technology and that comply with the quality assurance standards for the pump category. Superior emissions performance technology is that category or design of pumps or pump seals with emissions performance which, when combined with appropriate process, operating, and maintenance practices, will result in less than 10% leaking pumps for specific applications in the process unit or plant site. Superior emissions performance technology includes material or design changes to the existing pump, pump seal, seal support system, installation of multiple mechanical seals or equivalent, or pump replacement. (i) Pumps or pump seals shall be replaced at the rate of 20% per year based on the total number of pumps in light liquid service. The minimum number of pumps or pump seals shall be one. Pump replacement shall continue until all pumps subject to the requirements of Condition H.3.4(2), Table III.H of this Title V operating permit (40 CFR §63.163) are pumps determine to be superior performance technology. (ii) The Permittee may delay replacement of pump seals or pumps with superior technology until the next planned process unit shutdown, provided the number of pumps and pump seals replaced is equivalent to the 20% or greater annual replacement rate. (iii) The pumps shall be maintained as specified in the quality assurance program.	**40 CFR §63.502** (**Subpart H**) 40 CFR §63.176 "*Standards: Quality Improvement Program for Pumps*"	H.3.4(15) Continued

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **COMPLIANCE DEMONSTRATION**

H.1. **Latex Production:** Production of Latex shall not exceed the limit stated in Condition H.1, Table III.H of this Title V operating permit. Demonstration of compliance shall be based on the following requirements:

H.1.a. **Monitoring and Testing Requirements**

Annual latex production shall be based on any consecutive twelve-month period and shall be determined by adding the current month's production to that of the previous eleven months. These calculations shall be made on a monthly basis and be made available for inspection by the Commissioner upon request [Permit No. 092-0016].

H.1.b. **Record Keeping Requirements**

The Permittee shall maintain records of the requirement in Paragraph "a", Condition H.1, Compliance Demonstration, Section III of this Title V operating permit [Permit No. 092-0016].

H.2. **VOC:** Emissions of VOC shall not exceed the limit stated in Condition H.2, Table III.H of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

H.2.a. **Monitoring and Testing Requirements**

i. The Permittee shall comply with the operations manual for the styrene butadiene latex facility including maintenance checks of the scrubber control system, condensers, etc. The permittee shall maintain continuous compliance with the terms and conditions of Permit No. 092-0016 [Order No. 8011].

ii. The Permittee shall calculate annual process and fugitive emissions based on any consecutive twelve-month period and shall be determined by adding the current month's process and fugitive emissions to that of the previous eleven months. These calculations shall be made on a monthly basis and be made available for inspection by the Commissioner upon request [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

H.2.b. **Record Keeping Requirements**

The Permittee shall maintain records of the requirement in Paragraph "a", Condition H.2, Compliance Demonstration, Section III.H of this Title V operating permit [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **COMPLIANCE DEMONSTRATION**

H.3. Federal HAP: [H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15)] Emissions of HAP shall not exceed those limits stated in Condition H.3 (H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15)) Table III.H of this Title V operating permit. Demonstration of compliance shall be based on the following requirements:

H.3.1. Definitions

a. Record Keeping Requirements

The Permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept as long as the storage vessel retains Group 1 or Group 2 status and is in operation. For each Group 2 storage vessel the Permittee is not required to comply with any other provisions of Conditions H.3.1, H.3.2(1) - H.3.2(3), Table III.H of this Title V operating permit (40 CFR §§63.119 through 63.123, of Subpart G) [40 CFR §63.123(a)].

H.3.2(1) - H.3.2(3). Storage Vessel Requirements

a. Reporting Requirements

i. For each Group 1 storage vessel, the Permittee shall comply with the requirements of Paragraphs "a.i.(1)" through "a.i.(3)", Conditions H.3.2(1) - H.3.2(3), Compliance Demonstration, Section III of this Title V operating permit [40 CFR §63.122(a)].

(1) The Permittee shall submit a Notification of Compliance Status as required by 40 CFR §63.152(b) of Subpart G (but in accordance with 40 CFR §63.1335(e)(5)) and shall submit as part of the Notification of Compliance Status the information specified in Paragraph "a.iii", Conditions H.3.2(1) - H.3.2(3), Compliance Demonstration, Section III of this Title V operating permit.

(2) The Permittee shall submit Periodic Reports as required by 40 CFR §63.506(e)(6) of Subpart G and shall submit as part of the Periodic Reports the information specified in Paragraph "a.iv", Conditions H.3.2(1) - H.3.2(3), Compliance Demonstration, Section III of this Title V operating permit.

(3) The Permittee shall submit, as applicable, other reports as required by 40 CFR §63.152(d) of Subpart G, containing the information specified in

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
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- **COMPLIANCE DEMONSTRATION**

H.3.2(1) - H.3.2(3). Storage Vessel Requirements

a. <u>Reporting Requirements, Continued</u>

ii. The Permittee complying with Paragraph (a), Condition H.3.2(2), Table III.H of this Title V operating permit (40 CFR §63.119(e)) by using a closed vent system and a control device other than a flare shall submit, as part of the Monitoring Plan, the information specified in Paragraph (a)(2)(i), Condition H.3.2(3), Table III.H of this Title V operating permit (40 CFR §63.120(d)(2)(i)) and the information specified in either Paragraph (a)(2)(ii), Condition H.3.2(3) (40 CFR §63.120(d)(2)(ii)) or Paragraph (a)(2)(iii), Condition H.3.2(3), (40 CFR §63.120(d)(2)(iii) of Subpart G) Table III.H of this Title V operating permit [40 CFR §63.122(b)].

iii. The Permittee complying with Paragraph (a), Condition H.3.2(2), Table III.H of this Title V operating permit [40 CFR §63.119(e)] using a closed vent system and a control device shall submit, as part of the Notification of Compliance Status required by 40 CFR §63.152(b) of Subpart G, the information specified in either Paragraph "a.iii.(1)", Conditions H.3.2(1) - H.3.2(3), Compliance Demonstration, Section III of this Title V operating permit [40 CFR §63.122(c)].

(1) If a control device other than a flare is used, the Permittee shall submit the information specified in Paragraph (a)(3)(i) and if applicable Paragraph (a)(3)(ii), Condition H.3.2(3), Table III.H of this Title V operating permit (40 CFR §63.120(d)(3)(i) and, if applicable, (d)(3)(ii)).

iv. The Permittee complying with Condition H.3.2(2), Table III.H of this Title V operating permit (40 CFR §63.119(e)) by installing a closed vent system and control device shall submit, as part of the next Periodic Report required by 40 CFR §63.506(e)(6) of Subpart U, the information specified in Paragraphs "a.iv.(1)" through "a.iv.(2)" below, Conditions H.3.2(1) - H.3.2(3), Compliance Demonstration, Section III of this Title V operating permit [40 CFR §63.122(g)].

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- **COMPLIANCE DEMONSTRATION**

H.3.2(1) - H.3.2(3). Storage Vessel Requirements

a. Reporting Requirements, Continued

(1) As required by Paragraph (a)(4), Condition H.3.2(3), Table III.H of this Title V operating permit (40 CFR §63.120(d)(4)), the Periodic Report shall include the information specified in Paragraphs "a.iv.(1)(A)" and "a. iv.(1)(B)" below, Conditions H.3.2(1) - H.3.2(3), Compliance Demonstration, Section III of this Title V operating permit for those planned routine maintenance operations that would require the control device not to meet the requirements of Paragraph (a)(1) or (a)(2), Condition H.3.2(2), Table III.H of this Title V operating permit (40 CFR §63.119(e)(1) or (e)(2)), as applicable [40 CFR §63.122(g)(1)].

(A) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

(B) A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of Paragraphs (a)(1) or (a)(2), Condition H.3.2(2), Table III.H of this Title V operating permit (40 CFR §63.119 (e)(1) or (e)(2)], as applicable, due to planned routine maintenance.

(2) If a control device other than a flare is used, the Periodic Report shall describe each occurrence when the monitored parameters were outside of the parameter ranges documented in the Notification of Compliance Status in accordance with Paragraph (a), Condition H.3.2(3), Table III.H of this Title V operating permit (40 CFR §63.120(d)(3)(i)). The description shall include the information specified in Paragraphs "a.iv.(2)(A)" and "a.iv.(2)(B)" below, Conditions H.3.2(1) - H.3.2(3), Compliance Demonstration, Section III of this Title V operating permit.

(A) Identification of the control device for which the measured parameters were outside of the established ranges, and

(B) Cause for the measured parameters to be outside of the established ranges.

b. Record Keeping Requirements

i. The Permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 or Group 2 status and is in operation. For each Group 2 storage vessel, the Permittee is not required to comply with any other provisions of Conditions H.3.2(1) - H.3.2(3), Table III.H of this Title V operating permit (40 CFR §§63.119 through 63.123) other than those required by this Paragraph [40 CFR §63.119(a)].

H. GEU-016 - LATEX PRODUCTION:

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- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **COMPLIANCE DEMONSTRATION**

H.3.2(1) - H.3.2(3). Storage Vessel Requirements

b. Record Keeping Requirements, Continued

ii. The Permittee complying with Condition H.3.2(2), Table III.H of this Title V operating permit [40 CFR §63.119(e)] shall keep in a readily accessible location the records specified in Paragraphs "b.ii.(1)" and "b.ii.(2)" below [40 CFR §63.123(f)].

(1) A record of the measured values of the parameters monitored in accordance with Paragraph (a)(5), Condition H.3.2(3), Table III.H of this Title V operating permit (40 CFR §63.120(d)(5)) [40 CFR §63.123(f)(1)].

(2) A record of the planned routine maintenance performed on the control device including the duration of each time the control device does not meet the specifications of Paragraph (a)(1) or (a)(2), Condition H.3.2(2), Table III.H of this Title V operating permit (40 CFR §63.119 (e)(1) or (e)(2)), as applicable, due to the planned routine maintenance. Such a record shall include the information specified in Paragraphs "b.ii.(2)(A)" and "b.ii.(2)(B)" below [40 CFR §63.123(f)(2)].

(A) The first time of day and date the requirements of Paragraph (a)(1) or (a)(2), Condition H.3.2(2), Table III.H of this Title V operating permit (40 CFR §63.119 (e)(1) or (e)(2)), as applicable, were not met at the beginning of the planned routine maintenance, and

(B) The first time of day and date the requirements of Paragraph (a)(1) or (a)(2), Condition H.3.2(2), Table III.H of this Title V operating permit (40 CFR §63.119 (e)(1) or (e)(2)), as applicable, were met at the conclusion of the planned routine maintenance.

H.3.3. Continuous Front-End Process Vents

a. Monitoring Requirements and Excursions

i. The Permittee of a continuous front-end process vent that uses a combustion device or a recovery device or recapture device to comply with the requirements in Condition H.3.3, Table III.H (40 CFR § 63.113(a)(2)) of this Title V operating permit, shall install monitoring

H. GEU-016 - LATEX PRODUCTION:

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- **COMPLIANCE DEMONSTRATION**

H.3.3. Continuous Front-End Process Vents

a. <u>Monitoring Requirements and Excursions, Continued</u>

equipment specified below, in Paragraph "a.i.(1)", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit depending on the type of device used. All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturers specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately [40 CFR §63.114(a)].

(1) Where an incinerator is used, a temperature monitoring device equipped with a continuous recorder is required.

(A) Where an incinerator other than a catalytic incinerator is used, a temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs.

ii. The Permittee of a continuous front-end process vent may request approval to monitor parameters other than those listed in Paragraph "a.i.(1)", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit. The request shall be submitted according to the procedures specified in 40 CFR §63.151(f) or §63.152(e). Approval shall be requested if the Permittee [40 CFR §63.114(c)]:

(1) Uses one of the combustion or recovery or recapture devices listed in Paragraph (a), Condition H.3.3, Table III.H of this Title V operating permit (Paragraph (a), 40 CFR §63.113), but seeks to monitor a parameter other than those specified in Paragraph "a.i.(1)", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit.

iii. *Establishment of parameter monitoring levels*. The Permittee of a control or recovery device that has one or more parameter monitoring level requirements specified under this subpart shall establish a maximum or minimum level for each measured parameter. If a performance test is required by this subpart for a control device, the Permittee shall use the procedures in either Paragraph "a.iv", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit to establish the parameter monitoring level(s). If a performance test is not required by this subpart for a control device, the Permittee may use the procedures in Paragraph "a.iv" or "a.v", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit to establish the parameter monitoring levels. When using the procedures specified in Paragraph "a.iv" or "a.v", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit, the Permittee shall submit the information specified in 40 CFR §63.506(e)(3)(vii) for review and approval, as part of the Pre-compliance Report [40 CFR §§63.485(k) & 63.505(a)].

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- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **COMPLIANCE DEMONSTRATION**

H.3.3. Continuous Front-End Process Vents

a. <u>Monitoring Requirements and Excursions, Continued</u>

(1) The Permittee shall operate control and recovery devices such that the daily average of monitored parameters remains above the minimum established level or below the maximum established level, except as otherwise stated in 40 CFR Part 63, Subpart U.

(2) As specified in 40 CFR §63.506(e)(5), all established levels, along with their supporting documentation and the definition of an operating day, shall be submitted as part of the Notification of Compliance Status.

(3) Nothing in this section shall be construed to allow a monitoring parameter excursion caused by an activity that violates other applicable provisions of Subpart A, F, G, or H of 40 CFR Part 63.

iv. *Establishment of parameter monitoring levels based on performance tests, supplemented by engineering assessments and/or manufacturers recommendations.* In cases where a performance test is required by this 40 CFR Part 63, Subpart U, or the Permittee elects to do a performance test in accordance with the provisions of this Subpart U, and the Permittee elects to establish a parameter monitoring level for a control, recovery, or recapture device under this Paragraph "a.iv", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit, the Permittee shall supplement the parameter values measured during the performance test with engineering assessments and/or manufacturers recommendations. Performance testing is not required to be conducted over the entire range of expected parameter values [40 CFR §63.505(c)].

v. *Establishment of parameter monitoring based on engineering assessments and/or manufacturers recommendations.* In cases where a performance test is not required by 40 CFR Part 63, Subpart U and the Permittee elects to establish a parameter monitoring level for a control, recovery, or recapture device under this Paragraph "a.v", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit, the determination of the parameter monitoring level shall be based exclusively on engineering assessments and/or manufacturers recommendations [40 CFR §63.505(d)].

vi. *Parameter monitoring excursion definitions* [40 CFR §63.505(g)].

(1) With respect to storage vessels (where the applicable monitoring plan specifies continuous monitoring) and continuous front-end process vents complying through the use of control or recovery devices, an excursion means any of the three cases listed in Paragraphs "a.vi.(1)(A)" through "a.vi.(1)(C)", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit. For a control or recovery device where multiple parameters are monitored, if one or more of the parameters meets the excursion criteria in Paragraphs "a.vi.(1)(A)" through "a.vi.(1)(C), Condition H.3.3, Compliance Demonstration, Section III of this Title V operating

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- **COMPLIANCE DEMONSTRATION**

H.3.3. Continuous Front-End Process Vents

a. <u>Monitoring Requirements and Excursions, Continued</u>

permit, this is considered a single excursion for the control or recovery device. For each excursion, the Permittee shall be deemed out of compliance with the provisions of 40 CFR Part 63, Subpart U, except as provided in Paragraph "a.vii", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit [40 CFR §63.505(g)(1)].

(A) When the daily average value of one or more monitored parameters is above the maximum level or below the minimum level established for the given parameters.

(B) When the period of control or recovery device operation, with the exception noted in Paragraph "a.vi.(1)(E)", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit, is 4 hours or greater in an operating day and monitoring data are insufficient, as defined in Paragraph "a.vi.(1)(D)", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit, to constitute a valid hour of data for at least 75 percent of the operating hours.

(C) When the period of control or recovery device operation, with the exception noted in Paragraph "a.vi.(1)(E)", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit, is less than 4 hours in an operating day and more than two of the hours during the period of operation do not constitute a valid hour of data due to insufficient monitoring data, as defined in Paragraph "a.vi.(1)(D)", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit.

(D) Monitoring data are insufficient to constitute a valid hour of data, as used in Paragraphs "a.vi.(1)(B)" and "a.vi.(1)(C)", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit, if measured values are unavailable for any of the 15-minute periods within the hour. For data compression systems approved under 40 CFR §63.506(g)(3), monitoring data are insufficient to calculate a valid hour of data if there are less than four data measurements made during the hour.

(E) The periods listed in Paragraphs "a.vi.(1)(E)(i)" through "a.vi.(1)(E)(v)", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit are not considered to be part of the period of control or recovery device operation, for the purposes of Paragraphs "a.vi.(1)(B)" and "a.vi.(1)(C)", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit.

(i) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments;

(ii) Start-ups;

(iii) Shutdowns;

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- **COMPLIANCE DEMONSTRATION**

H.3.3. Continuous Front-End Process Vents

a. <u>Monitoring Requirements and Excursions, Continued</u>

(iv) Malfunctions; or

(v) Periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies.

(2) For storage vessels where the applicable monitoring plan does not specify continuous monitoring, an excursion is defined in Paragraph "a.vi.(2)(A)" or "a.vi.(2)(B)", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit, as applicable. For a control or recovery device where multiple parameters are monitored, if one or more of the parameters meets the excursion criteria, this is considered a single excursion for the control or recovery device. For each excursion, the Permittee shall be deemed out of compliance with the provisions of 40 CFR Part 63, Subpart U, except as provided in Paragraph "a.vii", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit [40 CFR §63.505(g)(3)].

(A) If the monitoring plan specifies monitoring a parameter and recording its value at specific intervals (such as every 15 minutes or every hour), either of the cases listed in Paragraph "a.vi.(2)(A)(i)" or "a.vi.(2)(A)(ii)", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit is considered a single excursion for the control device.

(i) When the average value of one or more parameters, averaged over the duration of the filling period for the storage vessel, is above the maximum level or below the minimum level established for the given parameters.

(ii) When monitoring data are insufficient. Monitoring data shall be considered insufficient when measured values are not available for at least 75 percent of the specific intervals at which parameters are to be monitored and recorded, according to the storage vessel's monitoring plan, during the filling period for the storage vessel.

(B) If the monitoring plan does not specify monitoring a parameter and recording its value at specific intervals (for example, if the relevant operating requirement is to exchange a disposable carbon canister before expiration of its rated service life), the monitoring plan shall define an excursion in terms of the relevant operating requirement.

vii. *Excused excursions.* A number of excused excursions shall be allowed for each control or recovery device for each semiannual period. The number of excused excursions for each semiannual period is specified in Paragraphs "a.vii.(1)" through "a.vii.(6)", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit. This paragraph applies to affected sources required to submit Periodic Reports semiannually or quarterly. The first semiannual period is the 6-month period starting the date the Notification of Compliance Status is due [40 CFR §63.505(i)].

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- **COMPLIANCE DEMONSTRATION**

H.3.3. Continuous Front-End Process Vents

a. Monitoring Requirements and Excursions, Continued

(1) For the first semiannual period -- six excused excursions.
(2) For the second semiannual period -- five excused excursions.
(3) For the third semiannual period -- four excused excursions.
(4) For the fourth semiannual period -- three excused excursions.
(5) For the fifth semiannual period -- two excused excursions.
(6) For the sixth and all subsequent semiannual periods -- one excused excursion.

b. Performance Test Methods and Procedures to Determine Compliance

The Permittee is not required to conduct a performance test when a control device for which a performance test was conducted for determining compliance with a regulation promulgated by the US EPA and the test was conducted using the same methods specified in this section and either no process changes have been made since the test, or the Permittee can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes [40 CFR §63.116(b)].

c. Reporting and Record Keeping Requirements for Performance Tests

i. The Permittee subject to the control provisions for Group 1 continuous front-end process vents in Condition H.3.3, Table III.H of this Title V operating permit (40 CFR §63.113(a)) shall [40 CFR §63.117(a)]:
   (1) Keep an up-to-date, readily accessible record of the data specified in Paragraph "c.i.(4)", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit, as applicable [40 CFR §63.117(a)(1)].
   (2) Include the data in Paragraph "c.i.(4)", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit in the Notification of Compliance Status report as specified in 40 CFR §63.506(e)(5) [40 CFR §63.117(a)(2)].
   (3) If any subsequent performance tests are conducted after the Notification of Compliance Status has been submitted, report the data in Paragraph "c.i.(4)", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit in the next Periodic Report as specified in 40 CFR §63.506(e)(5) [40 CFR §63.117(a)(3)].
   (4) Record and report the following when using a combustion device to achieve a 98% by weight reduction in organic HAP or an organic HAP concentration of 20 ppm by volume, as specified in Condition H.3.3, Table III.H of this Title V operating permit (40 CFR §63.113(a)(2)) [40 CFR §63.117(a)(4)]:
      (A) The parameter monitoring results for incinerators, catalytic incinerators, boilers or process heaters specified in Table 3 of 40 CFR Part 63, Subpart U, and averaged over the same time period of the performance testing.

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H.3.3. Continuous Front-End Process Vents

c. <u>Reporting and Record Keeping Requirements for Performance Tests, Continued</u>

(B) For an incinerator, the percent reduction of organic HAP or TOC achieved by the incinerator determined as specified in Paragraph "b.ii", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit (40 CFR §63.116(c)), or the concentration of organic HAP or TOC (ppm by volume, by compound) determined as specified in Paragraph "b.ii", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit at the outlet of the incinerator on a dry basis corrected to 3% oxygen.

ii. For each parameter monitored according to Tables 3 or 4, 40 CFR Part 63, Subpart U, the Permittee shall establish a range for the parameter that indicates proper operation of the control device. In order to establish the range, the information required in 40 CFR §63.506(e)(5) shall be submitted in the Notification of Compliance Status or the operating permit amendment [40 CFR §63.117(f)].

d. <u>Periodic Reporting and Record Keeping Requirements</u>

i. The Permittee, using a control device to comply with Condition H.3.3, Table III.H of this Title V operating permit (40 CFR §63.113(a)(1) or (a)(2)) shall keep the following records up-to-date and readily accessible [40 CFR §63.118(a)]:

(1) Continuous records of the equipment operating parameters specified to be monitored under Paragraph "a.i", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit (40 CFR §63.114(a)) and listed in Table 3 of 40 CFR Part 63, Subpart U or specified by the Administrator in accordance with Paragraph "a.ii", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit (40 CFR §63.114(c)).

(2) Records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in 40 CFR §63.152(f).

ii. The Permittee complying with the requirements of Condition H.3.3, Table III.H of this Title V operating permit (40 CFR §63.113) shall submit to the Administrator Periodic Reports of the following recorded information according to the schedule in 40 CFR §63.152 [40 CFR §63.118(f)].

(1) Reports of daily average values of monitored parameters for all operating days when the daily average values recorded under Paragraph "d.i", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit were outside the ranges established in the Notification of Compliance Status or operating permit.

(2) For Group 1 points, reports of the duration of periods when monitoring data is not collected for each excursion caused by insufficient monitoring data as defined in Paragraph "a.vi", Condition H.3.3, Compliance Demonstration, Section III of this Title V operating permit.

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- **COMPLIANCE DEMONSTRATION**

H.3.4(1) - H.3.4(15). Equipment Leaks

a. <u>Monitoring and Testing Requirements</u>

i. The Permittee shall conduct monitoring, in compliance with the following requirements [40 CFR §63.180(b)]:

(1) Monitoring shall comply with Method 21 of 40 CFR Part 60, Appendix A.

(2) (A) Except as provide for in Paragraph "a.i.(2)(B)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit, the detection instrument shall meet the performance criteria of Method 21 of 40 CFR Part 60, Appendix A, except the instrument response factor criteria in Section 3.1.2(a) of Method 21 of 40 CFR Part 60, Appendix A, shall be for the average composition of the process fluid not each individual VOC in the stream. For process streams that contain nitrogen, water, air, or other inerts which are not organic HAP or VOC, the average stream response factor may be calculated on an inert-free basis. The response factor may be determined at any concentration for which monitoring leaks will be conducted.

(B) If no instrument is available at the plant site that will meet the performance criteria specified in Paragraph "a.i.(2)(A)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit, the instrument readings may be adjusted by multiplying by the average response factor of the process fluid, calculated on an inert-free basis as described in Paragraph "a.i.(2)(A)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit.

(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR Part 60, Appendix A.

(4) Calibration gases shall be:

(A) Zero air (≤ ppm of hydrocarbon in air).

(B) Mixtures of methane in air at the concentrations specified in Paragraphs "a.i.(4)(A)" through "a.i.(4)(C)" below, Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit. A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in Paragraph "a.i.(2)(A)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit. In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air.

(i) For Phase I, a mixture of methane or other compounds, as applicable, in air at a concentration of approximately, but less than, 10,000 ppm.

(ii) For Phase II, a mixture of methane or other compounds, as applicable, and air at a concentration of approximately, but less than, 10,000 ppm for agitators, 5,000 ppm for pumps, and 500 ppm for all other equipment, except as provided in Paragraph "a.i.(4)(C)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit.

(iii) For Phase III (compliance phase starting March 12, 2002), a mixture of methane or other compounds, as applicable, and air at a concentration of approximately, but less than, 10,000 ppm methane for agitators; 5,000 ppm for pumps in polymerizing monomer service;

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H.3.4(1) - H.3.4.(15). Equipment Leaks

a. <u>Monitoring and Testing Requirements, Continued</u>

1,000 ppm for all other pumps; and 500 ppm for all other equipment except as provided in Paragraph "a.i.(4)(C)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit.

(C) The instrument may be calibrated at a higher methane concentration than the concentration specified for that piece of equipment. The concentration of the calibration gas may exceed the concentration specified as a leak by no more than 2,000 ppm. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 ppm above the concentration specified as a leak and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 ppm. If only one scale on an instrument will be used during monitoring, the Permittee need not calibrate the scales that will not be used during that day's monitoring.

(5) Monitoring shall be performed when the equipment is in organic HAP service, in use with an acceptable surrogate volatile organic compound which is not an organic HAP, or is in use with any other detectable gas or vapor.

(6) Monitoring data that do not meet the criteria specified in Paragraphs "a.i.(1)" through "a.i.(5)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit may be used to qualify for less frequent monitoring under the provision in 40 CFR §§63.168(d)(2)and (d)(3) or §§68.174(b)(3)(ii) or (b)(3)(iii), Conditions H.3.4(1) - (15) of this Title V operating permit provided the data meet the conditions specified in Paragraphs "a.i.(6)(A)" and "a.i.(6)(B)" below, Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit:

(A) The data was obtained before April 22, 1994.

(B) The departures from the criteria specified in Paragraphs "a.i.(1)" through "a.i.(5)" above, Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit from the specified monitoring frequency of Paragraph (c), Condition H.3.4(7), Table III.B of this Title V operating permit (40 CFR §63.168(c)) are minor and do not significantly affect the quality of the data. Examples of minor departures are monitoring at every six weeks instead of monthly or quarterly, following the performance criteria of Section 3.1.2(a) of Method 21 of 40 CFR Part 60, Appendix A, instead of Paragraph "a.i.(2)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit, or monitoring at a different leak definition if the data would indicate the presence of absence of a leak at the concentration specified in Condition H.3.4(1) - H.3.4(15), Table III.B of this Title V operating permit (Subpart H). Failure to use a calibrated instrument is not considered a minor departure.

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H.3.4(1) - H.3.4.(15). Equipment Leaks

a. <u>Monitoring and Testing Requirements, Continued</u>

ii. When equipment is monitored for compliance as required in Paragraph (i), Condition H.3.4(3); Paragraph (a), Condition H.3.4(4); and Paragraph (e), Condition H.3.4(11), Table III.B of this Title V operating permit (40 CFR §§63.164(i), 63.165(a), and 63.172(f)) or when equipment subject to a leak definition of 500 ppm is monitored for leaks as required by this Title V operating permit, the Permittee may elect to adjust or not to adjust the instrument readings for background. If the Permittee elects to not adjust instrument readings for background, the Permittee shall monitor the equipment according to the procedures specified in Paragraphs "a.i.(1)" through "a.i.(4)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit. In such case, all instrument readings shall be compared directly to the applicable leak definition to determine whether there is a leak. If the Permittee elects to not adjust instrument readings for background, the Permittee shall monitor the equipment according to the procedures specified in Paragraphs "a.ii.(1)" through "a.ii.(4)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit. In such case, all instrument readings shall be compared directly to the applicable leak definition to determine whether there is a leak. If the Permittee elects to adjust instrument readings for background, the Permittee shall monitor the equipment according to the procedures specified in Paragraphs "a.ii.(1)" through "a.ii.(4)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit [40 CFR §63.180(c)]:

(1) The requirements of Paragraphs "a.ii.(1)" through "a.ii.(4)" below, Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit shall apply.

(2) The background level shall be determined, using the same procedures that will be used to determine whether the equipment is leaking.

(3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 of 40 CFR Part 60, Appendix A.

(4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

iii. (1) Each piece of equipment within a process unit that can reasonably be expected to contain equipment in organic HAP service is presumed to be in organic HAP service unless the Permittee demonstrates that the piece of equipment is not in organic HAP service. For a piece of equipment to be considered not in organic HAP service, it must be determined that the percent organic HAP content can be reasonably expected not to exceed 5% by weight on an annual average basis. For purposes of determining the percent organic HAP content of the process fluid that is contained in or contacts equipment, Method 18 of 40 CFR Part 60, Appendix A shall be used (40 CFR §63.180(d)). Alternatively, Method 25A of 40 CFR Part 60, Appendix A may be used (40 CFR §63.1331(a)(8)). The organic HAP used as the calibration gas for Method 25A, 40 CFR Part 60, Appendix A, shall be the single organic HAP representing the largest percent by volume of the emissions. The use of Method 25A, 40 CFR Part 60, Appendix A is acceptable

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- **COMPLIANCE DEMONSTRATION**

H.3.4(1) - H.3.4.(15). Equipment Leaks

a. Monitoring and Testing Requirements, Continued

if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale [40 CFR §63.1331(a)(8)].

(2) (A) The Permittee may use good engineering judgment rather than the procedures in Paragraph "a.iii.(1)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit to determine that the percent organic HAP content does not exceed 5% by weight. When the Permittee and the Administrator do not agree on whether a piece of equipment is not in organic HAP service, however, the procedures in Paragraph "a.iii.(1)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit shall be used to resolve the disagreement.

(B) Conversely, the Permittee may determine that the organic HAP content of the process fluid does not exceed 5% by weight by, for example, accounting for 98% of the content and showing that organic HAP is less than 3%.

(3) If the Permittee determines that a piece of equipment is in organic HAP service, the determination can be revised after following the procedures in Paragraph "a.iii.(1)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit, or by documenting that a change in the process or raw materials no longer causes the equipment to be in organic HAP service.

(4) Samples used in determining the percent organic HAP content shall be representative of the process fluid that is contained in or contacts the equipment.

b. Record Keeping Requirements

i. The Permittee may comply with the record keeping requirements for these process units in one record keeping system if the system identifies each record by process unit and the program being implemented (e.g., quarterly monitoring, quality improvement) for each type of equipment. All records and information required by this section shall be maintained in a manner that can be readily accessed at the plant site. This could include physically locating the records at the plant site or accessing the records from a central location by computer at the plant site [40 CFR §63.181(a)].

ii. Except as provided in Paragraph "b.v", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit, the following information pertaining to all equipment in each process unit subject to the requirements in Conditions H.3.4(1) - H.3.4(13), Table III.H of this Title V operating permit (40 CFR §§63.162 through 63.174) shall be recorded [40 CFR §63.181(b)]:

(1) (A) A list of identification numbers for equipment except connectors exempt from monitoring and record keeping identified in Condition H.3.4(13), Table III.H of this Title V operating permit (40 CFR §63.174 and instrumentation systems) subject to the requirements of Conditions H.3.4(1) - H.3.4(15), Table III.H of this Title V operating permit (Subpart H). Connectors need not be individually identified if all connectors in a

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H.3.4(1) - H.3.4.(15). Equipment Leaks

b. Record Keeping Requirements, Continued

designated area or length of pipe subject to the provisions of Conditions H.3.4(1) - H.3.4(15), Table III.H of this Title V operating permit (Subpart H) are identified as a group, and the number of connectors subject is indicated. With respect to connectors, the list shall be complete no later than the completion of the initial survey required by Paragraph (b)(1) or (b)(2), Condition H.3.4(13), Table III.H (40 CFR §63.174(b)(1) or (b)(2)) of this Title V operating permit.

(B) A schedule by process unit for monitoring connectors subject to the provisions of Paragraph (a), Condition H.3.4(13), Table III.H of this Title V operating permit (40 CFR §63.174(a)) and valves subject to the provisions of Paragraph (c), Condition H.3.4(7), Table III.H of this Title V operating permit (40 CFR§63.168(d)).

(C) Physical tagging of the equipment to indicate that it is in organic HAP service is not required. Equipment may be identified on a plant site plan, in log entries, or by other appropriate methods.

(2) (A) A list of identification numbers for equipment that the Permittee elects to equip with a closed-vent system and control device, under the provisions of Paragraph (g), Condition H.3.4(2); Paragraph (h), Condition H.3.4(3); Paragraph (c), Condition H.3.4(4); or Paragraph (f), Condition H.3.4(12), Table III.H of this Title V operating permit (40 CFR §63.163(g), §63.164(h), §63.165(c), or §63.173(f)).

(B) A list of identification numbers for compressors that the Permittee elects to designate as operating with an instrument reading of less than 500 ppm above background, under the provisions of Paragraph (i), Condition H.3.4(3), Table III.H of this Title V operating permit (40 CFR §63.164(i)).

(3) (A) A list of identification numbers for pressure relief devices subject to the provisions in Paragraph (a), Condition H.3.4(4), Table III.H of this Title V operating permit (40 CFR §63.165(a)).

(B) A list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions of Paragraph (d), Condition H.3.4(4), Table III.H of this Title V operating permit (40 CFR §63.165(d)).

(4) Identification of instrumentation systems subject to the provisions of Condition H.3.4(1) - H.3.4(15), Table III.H of this Title V operating permit (Subpart H). Individual components in an instrumentation system need not be identified.

(5) Identification of screwed connectors subject to the requirements of Paragraph (c)(2), Condition H.3.4(13), Table III.H of this Title V operating permit (40 CFR §63.174(c)(2)). Identification can be by area or grouping as long as the total number within each group or area is recorded.

(6) The following information shall be recorded for each dual mechanical seal system:

(A) Design criteria required in Paragraph (e)(8), Condition H.3.4(2); Paragraph (e), Condition H.3.4(3); and Paragraph (d)(6)(i), Condition H.3.4(12), Table III.H of this Title V operating permit (40 CFR §§63.163(e)(6)(i), 63.164(e)(2), and 63.173(d)(6)(i)) and an explanation of the design

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **COMPLIANCE DEMONSTRATION**

H.3.4(1) - H.3.4.(15). Equipment Leaks

b. Record Keeping Requirements, Continued

criteria; and

(B) Any changes to these criteria and the reasons for the changes.

(7) The following information pertaining to all pumps subject to the provisions of Condition H.3.4(2) (40 CFR §63.163(j)), valves subject to the provisions of Condition H.3.4(7), Table III.H (40 CFR §63.168(h)) and Paragraph "b.ix", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit, agitators subject to the provisions of Condition H.3.4(12), Table III.H (40 CFR §63.173(h) through (j)), and connectors subject to the provisions of Condition H.3.4(13), Table III.H of this Title V operating permit (40 CFR §63.174(f) and (g)) shall be recorded:

(A) Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment.

(B) A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment.

(C) A list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair.

(8) (A) A list of valves removed from and added to the process unit, as described in Condition H.3.4(7), Table III.H of this Title V operating permit (40 CFR §63.168(e)(1)), if the net credits for removed valves is expected to be used.

(B) A list of connectors removed from and added to the process unit, as described in Paragraph (i), Condition H.3.4(13), Table III.H (40 CFR §63.174(i)(1), and documentation of the integrity of the weld for any removed connectors, as required in Paragraph (i)(2), Condition H.3.4(13), Table III.H (40 CFR §63.174(j)) of this Title V operating permit. This is not required unless the net credits for removed connectors are expected to be used.

iii. For visual inspections of equipment subject to the provisions of Paragraph (b) and Paragraph (e)(5), Condition H.3.4(2), Table III.H of this Title V operating permit (e.g., 40 CFR §63.163(b)(3), §63.163(e)(4)(i)), the Permittee shall document that the inspection was conducted and the date of the inspection. The Permittee shall maintain records as specified in Paragraph "b.iv" below, Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit for leaking equipment identified in this inspection, except as provided in Paragraph "b.v", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit [40 CFR §63.181(c)].

iv. When each leak is detected as specified in Conditions H.3.4(2), (3), (7), (8), (11) - (13), Table III.H of this Title V operating permit (40 CFR §§63.163 and 63.164; §§63.168 and 63.169; and §§63.172 through 63.174), the following information shall be recorded and kept for 5 years [40 CFR §63.181(d) & RCSA §22a-174-33(o)(2)]:

(1) The instrument and the equipment identification number and the operator name, initials, or identification number.

(2) The date the leak was detected and the date of first attempt to repair the leak.

(3) The date of successful repair of the leak.

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **COMPLIANCE DEMONSTRATION**

H.3.4(1) - H.3.4.(15). Equipment Leaks

b. Record Keeping Requirements, Continued

(4) Maximum instrument reading measured by Method 21 of 40 CFR Part 60, Appendix A after it is successfully repaired or determined to be non-repairable.

(5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(A) The Permittee may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by 40 CFR §63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

(B) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.

(6) Dates of process unit shutdowns that occur while the equipment is not repaired.

(7) (A) Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in Paragraph (b), Condition H.3.4(13), Table III.H of this Title V operating permit (40 CFR §63.174(b)), as described in Paragraph (c)(1)(i), Condition H.3.4(13), Table III.H (40 CFR §63.174(c)(1)), unless the Permittee elects to comply with the provisions of Paragraph (c)(1)(ii), Condition H.3.4(13), Table III.H of this Title V operating permit (40 CFR §63.174(c)(1)(ii)).

(B) The date and results of monitoring as required in Paragraph (c), Condition H.3.4(13), Table III.H of this Title V operating permit (40 CFR §63.174(c)). If identification of connectors that have been opened or otherwise had the seal broken is made by location under Paragraph "b.iv.(7)(A)", above, Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit, then all connectors within the designated location shall be monitored.

(8) Copies of the periodic reports as specified in Paragraph "c", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit (40 CFR §63.182(d)), if records are not maintained on a computerized database capable of generating summary reports from the records.

v. The Permittee of a batch product process who elects to pressure test the batch product process equipment train to demonstrate compliance is exempt from the requirements of Paragraphs "b.ii", "b.iii", "b.iv", and "b.vi", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit. Instead, the Permittee shall maintain records of the following information [40 CFR §63.181(e)]:

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **COMPLIANCE DEMONSTRATION**

H.3.4(1) - H.3.4.(15). Equipment Leaks

b. <u>Record Keeping Requirements, Continued</u>

(1) The identification of each product, or product code, produced during the calendar year. It is not necessary to identify individual items of equipment in a batch product process equipment train.

(2) Physical tagging of the equipment to identify that it is in organic HAP service and subject to the provisions of Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III (Subpart H) of this Title V operating permit is not required. Equipment in a batch product process subject to the provisions of Conditions H.3.4(1) - H.3.4(15), Table III.H (Subpart H) of this Title V operating permit may be identified on a plant site plan, in log entries, or by other appropriate methods.

(3) Records of any visible, audible, or olfactory evidence of fluid loss.

(4) When a batch product process equipment train does not pass two consecutive pressure tests, the following information shall be recorded in a log and kept for 2 years:

(A) The date of each pressure test and the date of each leak repair attempt.

(B) Repair methods applied in each attempt to repair the leak.

(C) The reason for the delay of repair.

(D) The expected date for delivery of the replacement equipment and the actual date of delivery of the replacement equipment.

(E) The date of successful repair.

vi. The dates and results of each compliance test required for compressors subject to the provisions in Paragraph (i), Condition H.3.4(3), Table III.H of this Title V operating permit (40 CFR §63.164(i)) and the dates and results of the monitoring following a pressure release for each pressure relief device subject to the provisions in Paragraphs (a) and (b), Condition H.3.4(4), Table III.H of this Title V operating permit (40 CFR §§63.165(a) and (b)). The results shall include [40 CFR §63.181(f)]:

(1) The background level measured during each compliance test.

(2) The maximum instrument reading measured at each piece of equipment during each compliance test.

vii. The Permittee shall maintain records of the information specified in Paragraphs "b.vii.(1)" through "b.vii.(3)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit for closed-vent systems and control devices subject to the provisions of Condition H.3.4(11), Table III.H of this Title V operating permit (40 CFR §63.172). The records specified in Paragraph "b.vii.(1)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit shall be retained for the life of the equipment. The records specified in Paragraphs "b.vii.(2)" and "b.vii.(3)", Conditions H.3.4(1) - H.3.4.(15), Compliance

H. GEU-016 - Latex Production:

- **EU-016A - EU-016AA - Reactors, Supporting Equipment, and Scrubber; EU-016BB - Butadiene Storage Sphere**
- **EU-016CC - Acrylic Acid Tank; EU-016DD - Tertiary-Dodecyl-Mercaptan Tank**
- **EU-016EE - Ammonium Hydroxide Storage Tank; EU-016FF - Hydroxyl-Ethyl-Acrylate Tank**

- **Compliance Demonstration**

H.3.4(1) - H.3.4.(15). Equipment Leaks

b. Record Keeping Requirements, Continued

Demonstration, Section III.H of this Title V operating permit shall be retained for 5 years [40 CFR §63.181(g) & RCSA §22a-174-33(o)(2)].

(1) The design specifications and performance demonstrations specified in Paragraphs "b.vii.(1)(A)" through "b.vii.(1)(D)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit.
   (A) Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams.
   (B) The dates and descriptions of any changes in the design specifications.
   (C) The flare design (i.e., steam-assisted, air-assisted, or non-assisted) and the results of the compliance demonstration required by 40 CFR §63.11(b) of Subpart A, of 40 CFR Part 63.
   (D) A description of the parameter or parameters monitored, as required in Paragraph (d), Condition H.3.4(11), Table III.H of this Title V operating permit (40 CFR §63.172(e)), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for monitoring.

(2) Records of operation of closed-vent systems and control devices, as specified in Paragraphs "b.vii.(2)(i)" through "b.vii.(2)(iii)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit.
   (A) Dates and duration when the closed-vent systems and control devices required in Conditions H.3.4(2) - H.3.4(5) and H.3.4(9), Table III.H, of this Title V operating permit (40 CFR §§63.163 through 63.166, and §63.170) are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame.
   (B) Date and duration during which the monitoring system or monitoring device is inoperative.
   (C) Date and duration of start-ups and shutdowns of control devices required in Conditions H.3.4(2) - H.3.4(5) and H.3.4(9), Table III.H, of this Title V operating permit (40 CFR §63.163 through 63.166, and §63.170).

(3) Records of inspections of closed-vent systems subject to the provisions of Condition H.3.4(11), Table III.H of this Title V operating permit (40 CFR §63.172), as specified in Paragraphs "b.vii.(3)(A)" and "b.vii.(3)(B)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit.
   (A) For each inspection conducted in accordance with the provisions of Paragraph (f)(1) or (f)(2), Condition H.3.4(11), Table III.H of this Title V operating permit (40 CFR §63.172(f)(1) or (f)(2)) during which no leaks were detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
   (B) For each inspection conducted in accordance with the provisions of Paragraph (f)(1) or (f)(2), Condition H.3.4(11), Table III.H of this

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **COMPLIANCE DEMONSTRATION**

H.3.4(1) - H.3.4.(15). Equipment Leaks

b. Record Keeping Requirements, Continued

Title V operating permit (40 CFR §63.172(f)(1) or (f)(2)) during which leaks were detected, the information specified in Paragraph "b.iv", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit shall be recorded.

viii. Each Permittee of a process unit subject to the requirements of Conditions H.3.4(14) and H.3.4(15), Table III.H of this Title V operating permit (40 CFR §§63.175 and 63.176) shall maintain the records specified in Paragraphs "b.viii.(1)" through "b.viii.(9)", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit for the period of the quality improvement program for the process unit [40 CFR §63.181(h)].

(1) If the Permittee elects to use a reasonable further progress quality improvement program, as specified in Paragraph (d), Condition H.3.4(14), Table III.H of this Title V operating permit [40 CFR §63.175(d)]:
   (A) All data required in Paragraph (d)(2), Condition H.3.4(14), Table III.H of this Title V operating permit.
   (B) The percent leaking valves observed each quarter and the rolling average percent reduction observed in each quarter.
   (C) The beginning and ending dates while meeting the requirements of Paragraph (d), Condition H.3.4(14), Table III.H of this Title V operating permit (40 CFR §63.175(d)).

(2) If the Permittee elects to use a quality improvement program of technology review and improvement, as specified in Paragraph (e), Condition H.3.4(14), Table III.H of this Title V operating permit (40 CFR §63.175(e)):
   (A) All data required in Paragraph (e)(2), Condition H.3.4(14), Table III.H of this Title V operating permit.
   (B) The percent leaking valves observed each quarter.
   (C) Documentation of all inspections conducted under the requirements of Paragraph (e)(4), Condition H.3.4(14), Table III.H of this Title V operating permit (40 CFR §63.175(e)(4)), and any recommendations for design or specification changes to reduce leak frequency.
   (D) The beginning and ending dates while meeting the requirements of Paragraph (e), Condition H.3.4(14), Table III.H of this Title V operating permit (40 CFR §63.175(e)).

(3) The Permittee subject to the requirements of the pump quality improvement program as specified in Condition H.3.4(15), Table III.H of this Title V operating permit (40 CFR §63.176):
   (A) All data required in Paragraph (d)(2), Condition H.3.4(15), Table III.H of this Title V operating permit (40 CFR §63.176(d)(2)).
   (B) The rolling average percent leaking pumps.
   (C) Documentation of all inspections conducted under the requirements of Paragraph (d)(4), Condition H.3.4(15), Table III.H of this Title

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **COMPLIANCE DEMONSTRATION**

H.3.4(1) - H.3.4.(15). Equipment Leaks

b. Record Keeping Requirements, Continued

V operating permit (40 CFR §63.176(d)(4)), and any recommendations for design or specification changes to reduce leak frequency.

(D) The beginning and ending dates while meeting the requirements of Paragraph (d), Condition H.3.4(15), Table III.H of this Title V operating permit (40 CFR §63.176(d)).

(4) If a leak is not repaired within 15 calendar days after discovery of the leak, the reason for the delay and the expected date of successful repair.

(5) Records of all analyses required in Paragraph (e), Condition H.3.4(14) and Paragraph (d), Condition H.3.4(15), Table III.H of this Title V operating permit (40 CFR §§63.175(e) and 63.176(d)). The records will include the following:

(A) A list identifying areas associated with poorer than average performance and the associated service characteristics of the stream, the operating conditions and maintenance practices.

(B) The reasons for rejecting specific candidate superior emission performing valve or pump technology from performance trials.

(C) The list of candidate superior emission performing valve or pump technologies, and documentation of the performance trial program items required under Paragraph (e)(6)(iii), Condition H.3.4(14) and Paragraph (d)(6)(iii), Condition H.3.4(15), Table III.H of this Title V operating permit (40 CFR §§63.175(e)(6)(iii) and 63.176(d)(6)(iii)).

(D) The beginning date and duration of performance trials of each candidate superior emission performing technology.

(6) All records documenting the quality assurance program for valves or pumps as specified in under Paragraph (e)(7), Condition H.3.4(14) and Paragraph (d)(7), Condition H.3.4(15), Table III.H of this Title V operating permit (40 CFR §§63.175(e)(7) and 63.176(d)(7)).

(7) Records indicating that all valves or pumps replaced or modified during the period of the quality improvement program are in compliance with the quality assurance requirements in under Paragraph (e)(7), Condition H.3.4(14) and Paragraph (d)(6), Condition H.3.4(15), Table III.H of this Title V operating permit (40 CFR §63.175(e)(7) and § 63.176(d)(6)).

(8) Records documenting compliance with the 20% or greater annual replacement rate for pumps as specified in Paragraph (d)(8), Condition H.3.4(15), Table III.H of this Title V operating permit (40 CFR §63.176(d)(8)).

(9) Information and data to show the corporation has fewer than 100 employees, including employees providing professional and technical contracted services (40 CFR §63.176(d)(9)).

ix. The Permittee of equipment in heavy liquid service shall comply with the requirements of either Paragraph “b.ix.(1)” or “b.ix.(2)”, Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit, as provided in Paragraph “b.ix.(3)”, Conditions H.3.4(1) -

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **COMPLIANCE DEMONSTRATION**

H.3.4(1) - H.3.4.(15). Equipment Leaks

b. Record Keeping Requirements, Continued

H.3.4(15), Compliance Demonstration, Section III of this Title V operating permit [40 CFR §63.181(i)].

(1) Retain information, data, and analyses used to determine that a piece of equipment is in heavy liquid service.

(2) When requested by the Administrator, demonstrate that the piece of equipment or process is in heavy liquid service.

(3) A determination or demonstration that a piece of equipment or process is in heavy liquid service shall include an analysis or demonstration that the process fluids do not meet the definition of "in light liquid service." Examples of information that could document this include, but are not limited to, records of chemicals purchased for the process, analyses of process stream composition, engineering calculations, or process knowledge.

x. Identification, either by list, location (area or group) of equipment in organic HAP service less than 300 hours per year within a process unit subject to the provisions of Conditions H.3.4(1) - H.3.4(15), Table III.H of this Title V operating permit (40 CFR §63.160) [40 CFR §63.181(j)].

c. Reporting Requirements

i. The Permittee shall submit the reports listed in Paragraphs "c.i.(1)", below, Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit [40 CFR §63.182(a) & §63.1331(a)].

(1) Periodic Reports described in Paragraph "c.iii", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit.

ii. The Permittee shall submit Periodic Reports [40 CFR §63.182(d)]. Such report may be submitted as part of the Periodic Reports required by Paragraph "c.iv.(5)" ("*General Record Keeping and Reporting*"), Conditions H.3.1, H.3.2(1) - H.3.2(3), and H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit [40 CFR §63.506(e)(6)].

(1) A report containing the information in Paragraphs "c.ii.(2)" and "c.ii.(3)", below, Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit shall be submitted semiannually no later than 60 operating days after the end of each 180-day period. The first report shall be submitted no later thqan 240 days after the daqte the Notification of compliance Status is due and shall cover the 6-month period begninning on the date the Notification of Compliance Status is due. Subsequent reports shall cover each predceding 6-month period.

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **COMPLIANCE DEMONSTRATION**

H.3.4(1) - H.3.4.(15). Equipment Leaks

c. Reporting Requirements, Continued

(2) For each process unit complying with the provisions of Conditions H.3.4(2) through H.3.4(13), Table III.H of this Title V operating permit (40 CFR §63.163 through §63.174), the summary information listed in Items (A) through (O) of this Paragraph for each monitoring period during the 6-month period.

(A) The number of valves for which leaks were detected as described in Paragraph (b), Condition H.3.4(7), Table III.H of this Title V operating permit (40 CFR §63.168(b)), the percent leakers, and the total number of valves monitored.

(B) The number of valves for which leaks were not repaired as required in Paragraph (f), Condition H.3.4(7), Table III.H of this Title V operating permit (40 CFR §63.168(f)), identifying the number of those that are determined non-repairable.

(C) The number of pumps for which leaks were detected as described in Paragraph (b), Condition H.3.4(2), Table III.H of this Title V operating permit (40 CFR §63.163(b)), the percent leakers, and the total number of pumps monitored.

(D) The number of pumps for which leaks were not repaired as required in Paragraph (c), Condition H.3.4(2), Table III.H of this Title V operating permit (40 CFR §63.163(c)).

(E) The number of compressors for which leaks were detected as described in Paragraph (f), Condition H.3.4(3), Table III.H of this Title V operating permit (40 CFR §63.164(f)).

(F) The number of compressors for which leaks were not repaired as required in Paragraph (g), Condition H.3.4(3), Table III.H of this Title V operating permit (40 CFR §63.164(g)).

(G) The number of agitators for which leaks were detected as described in Paragraph (a) and (b), Condition H.3.4(12), Table III.H of this Title V operating permit (40 CFR §63.173(a) and (b)).

(H) The number of agitators for which leaks were not repaired as required in Paragraph (c), Condition H.3.4(12), Table III.H of this Title V operating permit (40 CFR §63.173(c)).

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **COMPLIANCE DEMONSTRATION**

H.3.4(1) - H.3.4.(15). Equipment Leaks

c. Reporting Requirements, Continued

(I) The number of connectors for which leaks were detected as described in Paragraph (a), Condition H.3.4(13), Table III.H of this Title V operating permit (40 CFR §63.174(a)), the percent of connectors leaking, and the total number of connectors monitored.

(J) The number of connectors for which leaks were not repaired as required in Paragraph (d), Condition H.3.4(13), Table III.H of this Title V operating permit (40 CFR §63.174(d)), identifying the number of those that are determined non-repairable.

(K) The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible.

(L) The results of all monitoring to show compliance with Paragraph (i), Condition H.3.4(3); Paragraph (a), Condition H.3.4(4); and Paragraph (f), Condition H.3.4(11), Table III.H of this Title V operating permit (40 CFR §§63.164(i), 63.165(a), and 63.172(f)) conducted within the semiannual reporting period.

(M) If applicable, the initiation of a monthly monitoring program under Paragraph (d)(1)(i), Condition H.3.4(7), Table III.H of this Title V operating permit (40 CFR §63.168(d)(1)(i)), or a quality improvement program under either Condition H.3.4(14) or Condition H.3.4(15), Table III.H of this Title V operating permit (40 CFR §§63.175 or 63.176).

(N) If applicable, notification of a change in connector monitoring alternatives as described in Paragraph (c)(1), Condition H.3.4(13), Table III.H of this Title V operating permit (40 CFR §63.174(c)(1)).

(O) If applicable, the compliance option that has been selected under Paragraph (n), Condition H.3.4(11), Table III.H of this Title V operating permit (40 CFR §63.172(n)).

(3) The information listed in Paragraph "c.ii", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit for the Notification of Compliance Status for process units with later compliance dates. Any revisions to items reported in earlier Notification of Compliance Status, if the method of compliance has changed since the last report.

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- **COMPLIANCE DEMONSTRATION**

H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15). 40 CFR Part 63, Subpart U

a. Additional Test Methods and Procedures

i. Performance testing shall be conducted in accordance with 40 CFR §§63.7(a)(1), (a)(3), (d), (e)(1), (e)(2), (e)(4), (g), and (h), with the exceptions specified in Paragraph "a.i.(1)" through Paragraph "a.i.(5)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit and the additions specified in Paragraph "a.ii", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit. Conditions H.3.2(1) - H.3.2(3), Table III.H, Condition H.3.3, Table III.H of this Title V operating permit and Paragraph "a.iii", Condition H.3.3, Compliance Demonstration, Section III.H of this Title V operating permit also contain specific testing requirements [40 CFR §63.504(a)].

(1) Performance tests shall be conducted according to the provisions of 40 CFR §§63.7(e)(1) and (e)(2), except that performance tests shall be conducted at maximum representative operating conditions achievable during one of the time periods described in Paragraph "a.i.(1)(A)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit, without causing any of the situations described in Paragraph "a.i.(1)(B)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit to occur [40 CFR §63.504(a)(1)].

(A) The 6-month period that ends 2 months before the Notification of Compliance Status is due, according to 40 CFR §63.506(e)(5); or the 6-month period that begins 3 months before the performance test and ends 3 months after the performance test.

(B) Causing damage to equipment; necessitating that the Permittee make product that does not meet an existing specification for sale to a customer; or necessitating that the Permittee make product in excess of demand.

(2) References in 40 CFR §63.7(g) to the Notification of Compliance Status requirements in 40 CFR §63.9(h) shall refer to the requirements in 40 CFR §63.506(e)(5) [40 CFR §63.504(a)(2)].

(3) The Permittee shall notify the Administrator of the intent to conduct a performance test at least 30 days before the performance test is scheduled, to allow the Administrator the opportunity to have an observer present during the test. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the Permittee of an affected facility shall notify the Administrator as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator by mutual agreement [40 CFR §63.504(a)(4)].

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- **COMPLIANCE DEMONSTRATION**

H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15). 40 CFR Part 63, Subpart U

a. Additional Test Methods and Procedures, Continued

(4) Performance tests shall be performed no later than 150 days after the compliance dates specified in 40 CFR Part 63, Subpart U (*i.e.*, in time for the results to be included in the Notification of Compliance Status), rather than according to the time periods in 40 CFR §63.7(a)(2) [40 CFR §63.504(a)(5)].

ii. Data shall be reduced in accordance with the US EPA approved methods specified in the applicable subpart or, if other test methods are used, the data and methods shall be validated according to the protocol in Method 301, 40 CFR Part 63, Appendix A [40 CFR §63.504(b)].

b. General Record Keeping and Reporting Requirements

i. *Data retention.* Unless otherwise specified in 40 CFR Part 63, Subpart U (Subpart U), the Permittee shall keep copies of all applicable records and reports required by this Subpart U for at least 5 years, as specified in Paragraph "b.i.(1)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit, with the exception listed in Paragraph "b.i.(2)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit [40 CFR §63.506(a)]

(1) All applicable records shall be maintained in such a manner that they can be readily accessed. The most recent 6 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provide access within 2 hours after a request. The remaining 4 and one-half years of records may be retained offsite. Records may be maintained in hard copy or computer-readable form including, but not limited to, on microfilm, computer, floppy disk, magnetic tape, or microfiche.

(2) If the Permittee submits copies of reports to the appropriate US EPA Regional Office, then the Permittee is not required to maintain copies of reports. If the US EPA Regional Office has waived the requirement of 40 CFR §63.10(a)(4)(ii) for submittal of copies of reports, the Permittee is not required to maintain copies of those reports.

ii. *Subpart A requirements.* The Permittee shall comply with the applicable record keeping and reporting requirements in 40 CFR Part 63, Subpart A as specified in Table 1 of Subpart U. These requirements include, but are not limited to, the requirements specified in Paragraphs "b.ii.(1)" and "b.ii.(2)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit [40 CFR §63.506(b)].

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- **COMPLIANCE DEMONSTRATION**

H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15). 40 CFR Part 63, Subpart U

b. General Record Keeping and Reporting Requirements, Continued

(1) *Start-up, shutdown, and malfunction plan.* The Permittee shall develop and implement a written start-up, shutdown, and malfunction plan as specified in 40 CFR §63.6(e)(3). This plan shall describe, in detail, procedures for operating and maintaining the affected source during periods of start-up, shutdown, and malfunction and a program for corrective action for malfunctioning process and air pollution control equipment used to comply with Subpart U. For equipment leaks (subject to Conditions H.3.4(1) - H.3.4.(15), Table III.H of this Title V operating permit), the start-up, shutdown, and malfunction plan requirement is limited to control devices and is optional for other equipment. For equipment leaks, the start-up, shutdown, and malfunction plan may include written procedures that identify conditions that justify a delay of repair. A provision for ceasing to collect, during a start-up, shutdown, or malfunction, monitoring data that would otherwise be required by the provisions of this subpart may be included in the start-up, shutdown, and malfunction plan only if the Permittee has demonstrated to the Administrator, through the Pre-compliance Report or a supplement to the Pre-compliance Report, that the monitoring system would be damaged or destroyed if it were not shut down during the start-up, shutdown, or malfunction. The affected source shall keep the start-up, shutdown, and malfunction plan on-site. Records associated with the plan shall be kept as specified in Paragraphs "b.ii.(1)(A)(i)" and "b.ii.(1)(A)(iii)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit. Reports related to the plan shall be submitted as specified in Paragraph "b.ii.(1)(B)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit [40 CFR §63.506(b)(1)].

(A) *Records of start-up, shutdown, and malfunction.* The Permittee shall keep the records specified in Paragraphs "b.ii.(1)(A)(i)" through "b.ii.(1)(A)(iii)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit.

(i) Records of the occurrence and duration of each start-up, shutdown, and malfunction of operation of process equipment or control devices or recovery devices or continuous monitoring systems used to comply with this subpart during which excess emissions occur.

(ii) For each start-up, shutdown, or malfunction during which excess emissions (as defined in 40 CFR §63.480(j)(4)) occur, records reflecting whether the procedures specified in the affected source's start-up, shutdown, and malfunction plan were followed, and documentation of actions taken that are not consistent with the plan. For example, if a start-up, shutdown, and malfunction plan

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- **COMPLIANCE DEMONSTRATION**

H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15). 40 CFR Part 63, Subpart U

b. General Record Keeping and Reporting Requirements, Continued

includes procedures for routing a control device to a backup control device, records shall be kept of whether the plan was followed. These records may take the form of a "checklist," or other form of record keeping that confirms conformance with the start-up, shutdown, and malfunction plan for the event.

(B) *Reports of start-up, shutdown, and malfunction.* For the purposes of Subpart U, the semiannual start-up, shutdown, and malfunction reports shall be submitted on the same schedule as the Periodic Reports required under Paragraph "b.v.(6)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit instead of the schedule specified in 40 CFR §63.10(d)(5)(i). The reports shall include the information specified in 40 CFR §63.10(d)(5)(i).

(2) *Application for approval of construction or reconstruction.* For new affected sources, the Permittee shall comply with the provisions in 40 CFR §63.5 regarding construction and reconstruction, excluding the provisions specified in 40 CFR §63.5(d)(1)(ii)(H), (d)(1)(iii), (d)(2), and (d)(3)(ii) [40 CFR §63.506(b)(2)].

iii. *Record keeping and documentation.* The Permittee, if required to keep continuous records shall keep records as specified in Paragraphs "b.iii.(1)" through "b.iii.(5)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit, unless an alternative record keeping system has been requested and approved as specified in Paragraph "b.vii", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit, and except as provided in Paragraph "b.viii", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit. If a monitoring plan for storage vessels pursuant to 40 CFR §63.484(k) requires continuous records, the monitoring plan shall specify which provisions, if any, of Paragraphs "b.iii.(1)" through "b.iii.(5)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit apply. As described in 40 CFR §63.484(k), certain storage vessels are not required to keep continuous records as specified in this paragraph. The Permittee of such storage vessels shall keep records as specified in the monitoring plan required by 40 CFR §63.484(k). Paragraphs "b.iii.(6)" and "b.iii.(7)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit specify documentation requirements [40 CFR §63.506(d)].

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- **COMPLIANCE DEMONSTRATION**

H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15). 40 CFR Part 63, Subpart U

b. General Record Keeping and Reporting Requirements, Continued

(1) The monitoring system shall measure data values at least once every 15 minutes [40 CFR §63.506(d)(1)].

(2) The Permittee shall record either each measured data value or block average values for 1 hour or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values [40 CFR §63.506(d)(2)].

(3) Daily average values of each continuously monitored parameter shall be calculated for each operating day as specified in Paragraphs "b.iii.(3)(A)" through "b.iii.(3)(B)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit, except as specified in Paragraphs "b.iii.(4)" through "b.iii.(5)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III of this Title V operating permit [40 CFR §63.506(d)(3)].

(A) The daily average value shall be calculated as the average of all parameter values recorded during the operating day, except as specified in Paragraph "b.iii.(5)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit. The calculated average shall cover a 24-hour period if operation is continuous, or the number of hours of operation per operating day if operation is not continuous.

(B) The operating day shall be the period that the Permittee specifies in the operating permit or the Notification of Compliance Status for purposes of determining daily average values of monitored parameters.

(4) *Records required when all recorded values are within the established limits.* If all recorded values for a monitored parameter during an operating day are above the minimum level or below the maximum level established in the Notification of Compliance Status or operating permit, the Permittee may record that all values were above the minimum level or below the maximum level rather than calculating and recording a daily average for that operating day [40 CFR §63.506(d)(6)].

(5) Monitoring data recorded during periods identified in Paragraphs "b.iii.(5)(A)" through "b.iii.(5)(E)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit shall not be included in any average computed under Subpart U. Records shall be kept of the times and durations of all such periods and any other periods during process or control device or recovery device operation when monitors are not operating [40 CFR §63.506(d)(7)].

(A) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments;

(B) Start-ups;

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- **COMPLIANCE DEMONSTRATION**

H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15). 40 CFR Part 63, Subpart U

b. General Record Keeping and Reporting Requirements, Continued

(C) Shutdowns;
(D) Malfunctions; or
(E) Periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies.

(6) For continuous monitoring systems used to comply with Subpart U, records documenting the completion of calibration checks, and records documenting the maintenance of continuous monitoring systems that are specified in the manufacturers instructions or that are specified in other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately [40 CFR §63.506(d)(8)].

(7) The Permittee granted a waiver under 40 CFR §63.10(f) shall maintain the information, if any, specified by the Administrator as a condition of the waiver of record keeping or reporting requirements [40 CFR §63.506(d)(9)].

iv. *Reporting and notification.* In addition to the reports and notifications required by Subpart A, as specified in Table 1, Subpart U, the Permittee shall prepare and submit the reports listed in Paragraphs "b.iv.(3)" through "b.iv.(7)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit, as applicable. All reports required by Subpart U, and the schedule for their submittal, are listed in Table 9 of Subpart U [40 CFR §63.506(e)].

(1) The Permittee shall not be in violation of the reporting requirements of Subpart U for failing to submit information required to be included in a specified report if the Permittee meets the requirements in Paragraphs "b.iv.(1)(A)" through "b.iv.(1)(C)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit. Examples of circumstances where this paragraph may apply include information related to newly-added equipment or emission points, changes in the process, changes in equipment required or utilized for compliance with the requirements of this subpart, or changes in methods or equipment for monitoring, record keeping, or reporting [40 CFR §63.506(e)(1)].

(A) The information was not known in time for inclusion in the report specified by this subpart;
(B) The Permittee has been diligent in obtaining the information; and
(C) The Permittee submits a report according to the provisions of Paragraphs "b.iv.(1)(C)(i)" through "b.iv.(1)(C)(iii)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit.

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- **COMPLIANCE DEMONSTRATION**

H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15). 40 CFR Part 63, Subpart U

b. General Record Keeping and Reporting Requirements, Continued

(i) If Subpart U expressly provides for supplements to the report in which the information is required, the Permittee shall submit the information as a supplement to that report. The information shall be submitted no later than 60 days after it is obtained, unless otherwise specified in Subpart U.

(ii) If Subpart U does not expressly provide for supplements, but the Permittee must submit a request for revision of an operating permit pursuant to 40 CFR Part 70 or Part 71, due to circumstances to which the information pertains, the Permittee shall submit the information with the request for revision to the operating permit.

(iii) In any case not addressed by Paragraph "b.iv.(1)(C)(i)" or "b.iv.(1)(C)(ii)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating, the Permittee shall submit the information with the first Periodic Report, as required by Subpart U, which has a submission deadline at least 60 days after the information is obtained.

(2) All reports required under Subpart U shall be sent to the Administrator at the appropriate address listed in 40 CFR §63.13. If acceptable to both the Administrator and the Permittee, reports may be submitted on electronic media [40 CFR §63.506(e)(2)].

(3) *Periodic Reports.* For existing and new affected sources, the Permittee shall submit Periodic Reports as specified in Paragraphs "b.iv.(3)(A)" through "b.iv.(3)(I)", below, Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15) ("*General Record Keeping and Reporting Requirements*"), Compliance Demonstration, Section III.H of this Title V operating permit. In addition, for equipment leaks subject to Conditions H.3.4(1) - H.3.4.(15), Table III.H of this Title V operating permit (40 CFR §63.502), the Permittee shall submit the information specified in Paragraph "c.iii", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, (40 CFR §63.182(d)) under the conditions listed in Paragraph "c.iii", Conditions H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit (40 CFR §63.182(d)) [40 CFR §63.506(e)(6)].

(A) A report containing the information in Paragraph "b.iv.(3)(B)" or Paragraph "b.iv.(3)(C)" through Paragraph "b.iv.(3)(I)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15) ("*General Record Keeping and Reporting Requirements*"), Compliance Demonstration, Section III.H of this Title V operating permit, as appropriate, shall be submitted semiannually no later than 60 days after the end of each 6-month period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status is due [40 CFR §63.506(e)(6)(i)].

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **COMPLIANCE DEMONSTRATION**

H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15). 40 CFR Part 63, Subpart U

b. General Record Keeping and Reporting Requirements, Continued

(B) If none of the compliance exceptions in Paragraphs "b.iv.(3)(C)" through "b.iv.(3)(H)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15) ("*General Record Keeping and Reporting Requirements*"), Compliance Demonstration, Section III.H of this Title V operating permit occurred during the 6-month period, the Periodic Report required by Paragraph "b.iv.(3)(A)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit ("*General Record Keeping and Reporting Requirements*") shall be a statement that there were no compliance exceptions as described in this paragraph for the 6-month period covered by that report and that none of the activities specified in Paragraphs "b.iv.(3)(C)" through "b.iv.(3)(I)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15) ("*General Record Keeping and Reporting Requirements*"), Compliance Demonstration, Section III.H of this Title V operating permit occurred during the 6-month period covered by that report [40 CFR §63.506(e)(6)(ii)].

(C) The Permittee complying with the provisions of Conditions H.3.2(1) - H.3.2(3), H.3.3 Table III.H of this Title V operating permit (40 CFR §§63.484 through 63.501) for any emission point, Periodic Reports shall include [40 CFR §63.506(e)(6)(iii)]:

(i) All information specified in Paragraph "a.i", Conditions H.3.2(1) - H.3.2(3), Compliance Demonstration, Section III.H of this Title V operating permit (40 CFR §63.122(a)(4)) for storage vessels, Paragraphs "c.i.(3)" and "d.ii", Condition H.3.3, Compliance Demonstration, Section III.H of this Title V operating permit (§§ 63.117(a)(3) and 63.118(f)) and 40 CFR §63.485(s)(5) for continuous front-end process vents.

(ii) The daily average values of monitored parameters for all excursions, as defined in Paragraph "a.vi", Condition H.3.3, Compliance Demonstration, Section III.H of this Title V operating permit (40 CFR §63.505(g)). For excursions caused by lack of monitoring data, the start-time and duration of periods when monitoring data were not collected shall be specified.

(iii) The information in Paragraph "b.iv.(3)(C)(iii)(*1*)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15) ("*General Record Keeping and Reporting Requirements*"), Compliance Demonstration, Section III.H of this Title V operating permit, as applicable:

(*1*) Notification if one or more emission points (other than equipment leaks) or one or more elastomer product process unit (EPPU) is added to an affected source. The Permittee shall submit the information contained in Paragraphs "b.iv.(3)(C)(iii)(*1*)(*a*)" through "b.iv.(3)(C)(iii)(*1*)(*b*)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15) ("*General Record Keeping and Reporting Requirements*"), Compliance Demonstration, Section III.H of this Title V operating permit.

(a) A description of the addition to the affected source; and

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **COMPLIANCE DEMONSTRATION**

H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15). 40 CFR Part 63, Subpart U

b. General Record Keeping and Reporting Requirements, Continued

(b) Notification of the group status of the additional emission point or all emission points in the EPPU.

(iv) The information in Paragraph "b.ii.(1)(B)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15) ("*General Record Keeping and Reporting Requirements*"), Compliance Demonstration, Section III.H of this Title V operating permit for reports of startup, shutdown, and malfunction [40 CFR §63.506(e)(6)(iv)].

(D) If any performance tests are reported in a Periodic Report, the following information shall be included [40 CFR §63.506(e)(6)(v)]:

(i) One complete test report shall be submitted for each test method used for a particular kind of emission point tested. A complete test report shall contain the information specified in Paragraph "b.iv.(4)(A)(ii)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15) ("*General Record Keeping and Reporting Requirements*"), Compliance Demonstration, Section III.H of this Title V operating permit.

(ii) For additional tests performed for the same kind of emission point using the same method, results and any other information, pertaining to the performance test, that is requested on a case-by-case basis by the Administrator shall be submitted, but a complete test report is not required.

(E) Notification of a change in the primary product of an EPPU, in accordance with the provisions in 40 CFR §63.480(f). This includes a change in primary product from one elastomer product to either another elastomer product or to a non-elastomer product [40 CFR §63.506(e)(6)(vi)].

(F) The results for each change made to a predominant use determination made under 40 CFR §63.480(g) for a storage vessel that is assigned to an affected source subject to this subpart after the change [40 CFR §63.506(e)(6)(vii)].

(G) The results for each change made to a predominant use determination made under 40 CFR §63.480(h) for recovery operations equipment assigned to an affected source subject to this subpart after the change.

(H) The Permittee complying with Paragraph "b.v.(1)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15) ("*General Record Keeping and Reporting Requirements*") shall notify the Administrator of the election to comply with Paragraph "b.v.(1)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15) ("*General Record Keeping and Reporting Requirements*"), Compliance Demonstration, Section III.H of this Title V operating permit as part of the Periodic Report or as part of the Notification of Compliance Status [40 CFR §63.506(e)(6)(ix)].

(I) An Permittee electing not to retain daily average values under Paragraph "b.v.(2)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15) ("*General Record Keeping and Reporting Requirements*"), Compliance Demonstration, Section III.H of this Title V operating permit shall notify the Administrator as specified in Paragraph "b.v.(2)(A)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15) ("*General Record Keeping and Reporting Requirements*"), Compliance Demonstration, Section III.H of this Title V operating permit [40 CFR §63.506(e)(6)(x)].

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **COMPLIANCE DEMONSTRATION**

H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15). 40 CFR Part 63, Subpart U

b. General Record Keeping and Reporting Requirements, Continued

(4) *Other reports.* Other reports shall be submitted as specified in Paragraphs "b.iv.(4)(A)" through "b.iv.(4)(C)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15) ("*General Record Keeping and Reporting Requirements*"), Compliance Demonstration, Section III.H of this Title V operating permit [40 CFR §63.506(e)(7)].

(A) For storage vessels, the notifications of inspections required by Conditions H.3.2(1) - H.3.2(3), Table III.H of this Title V operating permit (40 CFR §63.484) shall be submitted, as specified in 40 CFR §63.122(h)(1) and (h)(2).

(B) When the conditions of 40 CFR §§63.480(f)(3)(iii), (f)(9), or 63.480(f)(10)(iii) are met, reports of changes to the primary product for an EPPU or process unit, as required by 40 CFR §§63.480(f)(3)(iii), 63.480(f)(9), or 63.480(f)(10)(iii)(C), respectively, shall be submitted.

(C) Owners or operators of EPPU or emission points (other than equipment leak components subject to Conditions H.3.4(1) - H.3.4.(15), Table III.H of this Title V operating permit (40 CFR §63.502)) that are subject to 40 CFR §63.480(i)(1) or (i)(2) shall submit a report as specified in Paragraphs "b.iv.(4)(C)(i)" and "b.iv.(4)(C)(ii)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15) ("*General Record Keeping and Reporting Requirements*"), Compliance Demonstration, Section III.H of this Title V operating permit.

(i) Reports shall include:

(*1*) A description of the process change or addition, as appropriate;

(*2*) The planned start-up date and the appropriate compliance date, according to 40 CFR §63.480(i)(1) or (2);

(*3*) Identification of the group status of emission points (except equipment leak components subject to the requirements in Conditions H.3.4(1) - H.3.4.(15), Table III.H (40 CFR §63.502)) specified in Paragraphs "b.iv.(4)(C)(i)(*3*)(*a*) through (*c*)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15) ("*General Record Keeping and Reporting Requirements*"), Compliance Demonstration, Section III.H of this Title V operating permit, as applicable.

(*a*) All the emission points in the added EPPU, as described in 40 CFR §63.480(i)(1).

(*b*) All the emission points in an affected source designated as a new affected source under 40 CFR §63.480(i)(2)(i).

(*c*) All the added or created emission points as described in 40 CFR §63.480(i)(2)(ii) or (i)(2)(iii).

(*4*) If the Permittee wishes to request approval to use alternative monitoring parameters, alternative continuous monitoring or record keeping, alternative controls, engineering assessment to estimate emissions from a batch emissions episode, or wishes to establish parameter monitoring levels according to the procedures contained in Paragraph "a.iv" or "a.v", Condition H.3.3, Compliance Demonstration, Section III.H of this Title V operating permit 40 CFR §63.505(c) or (d), a Pre-compliance Report shall be submitted in accordance with Paragraph "b.iv.(4)(C)(ii)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15) ("*General Record Keeping and Reporting Requirements*"), Compliance Demonstration, Section III.H of this Title V operating permit.

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
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- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **COMPLIANCE DEMONSTRATION**

H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15). 40 CFR Part 63, Subpart U

b. General Record Keeping and Reporting Requirements, Continued

(ii) Reports shall be submitted as specified in Paragraph "b.iv.(4)(C)(ii)(*1*)" through "b.iv.(4)(C)(ii)(*3*)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15) ("*General Record Keeping and Reporting Requirements*"), Compliance Demonstration, Section III.H of this Title V operating permit, as appropriate.

(*1*) The Permittee of an added EPPU subject to 40 CFR §63.480(i)(1) shall submit a report no later than 180 days prior to the compliance date for the EPPU.

(*2*) The Permittee designated as a new affected source under 40 CFR §63.480(i)(2)(i) shall submit a report no later than 180 days prior to the compliance date for the affected source.

(*3*) The Permittee of any emission point (other than equipment leak components subject to Conditions H.3.4(1) - H.3.4.(15), Table III.H of this Title V operating permit (40 CFR §63.502)) subject to 40 CFR §63.480(i)(2)(ii) or (i)(2)(iii) shall submit a report no later than 180 days prior to the compliance date for those emission points.

(5) *Operating permit application.* A Permittee who submits an operating permit application instead of a Pre-compliance Report shall include the following information with the operating permit application [40 CFR §63.506(e)(8)]:

(A) The information specified in Paragraph "b.iv.(3)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit, Pre-compliance Report, as applicable.

v. *Reduced record keeping program.* For any parameter with respect to any item of equipment, the Permittee may implement the record keeping requirements in Paragraph "b.v.(1)" or "b.v.(2)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit as alternatives to the continuous operating parameter monitoring and record keeping provisions that would otherwise apply under this subpart. The Permittee shall retain for a period of 5 years each record required by Paragraph "b.v.(1)" or "b.v.(2)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, except as otherwise provided in Paragraph "b.v.(1)(F)(iv)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit [40 CFR §63.506(h)].

(1) The Permittee may retain only the daily average value, and is not required to retain more frequent monitored operating parameter values, for a monitored parameter with respect to an item of equipment, if the requirements of Paragraphs "b.v.(1)(A)" through "b.v.(1)(F)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit are met. The Permittee electing to comply with the requirements of Paragraph "b.v.(1)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration shall notify the Administrator in the Notification of

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
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- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **COMPLIANCE DEMONSTRATION**

H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15). 40 CFR Part 63, Subpart U

b. General Record Keeping and Reporting Requirements, Continued

Compliance Status as specified in Paragraph "b.iv.(4)(H)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit, or, if the Notification of Compliance Status has already been submitted, in the Periodic Report immediately preceding implementation of the requirements of Paragraph "b.v.(1)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, as specified in Paragraph "b.iv.(5)(H)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit [40 CFR §63.506(h)(1)].

(A) The monitoring system is capable of detecting unrealistic or impossible data during periods of operation other than startups, shutdowns or malfunctions (e.g., a temperature reading of −200 °C on a boiler), and will alert the operator by alarm or other means. The Permittee shall record the occurrence. All instances of the alarm or other alert in an operating day constitute a single occurrence [40 CFR §63.506(h)(1)(i)].

(B) The monitoring system generates, updated at least hourly throughout each operating day, a running average of the monitoring values that have been obtained during that operating day, and the capability to observe this running average is readily available to the Administrator on-site during the operating day. The Permittee shall record the occurrence of any period meeting the criteria in Paragraphs "b.v.(1)(B)(i)" through "b.v.(1)(B)(iii)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration. All instances in an operating day constitute a single occurrence [40 CFR §63.506(h)(1)(ii)].

(i) The running average is above the maximum or below the minimum established limits;

(ii) The running average is based on at least six one-hour average values; and

(iii) The running average reflects a period of operation other than a startup, shutdown, or malfunction.

(C) The monitoring system is capable of detecting unchanging data during periods of operation other than startups, shutdowns or malfunctions, except in circumstances where the presence of unchanging data is the expected operating condition based on past experience (e.g., pH in some scrubbers), and will alert the operator by alarm or other means. The Permittee shall record the occurrence. All instances of the alarm or other alert in an operating day constitute a single occurrence [40 CFR §63.506(h)(1)(iii].

(D) The monitoring system will alert the Permittee by an alarm or other means, if the running average parameter value calculated under Paragraph "b.v.(1)(B)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit reaches a set point that is appropriately related to the established limit for the parameter that is being monitored [40 CFR §63.506(h)(1)(iv)].

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **COMPLIANCE DEMONSTRATION**

H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15). 40 CFR Part 63, Subpart U

b. General Record Keeping and Reporting Requirements, Continued

(E) The Permittee shall verify the proper functioning of the monitoring system, including its ability to comply with the requirements of Paragraph "b.v.(1)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, at the times specified in Paragraphs "b.v.(1)(E)(i)" through "b.v.(1)(E)(iii)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit. The Permittee shall document that the required verifications occurred [40 CFR §63.506(h)(1)(v)].

(i) Upon initial installation.

(ii) Annually after initial installation.

(iii) After any change to the programming or equipment constituting the monitoring system, which might reasonably be expected to alter the monitoring system's ability to comply with the requirements Paragraphs "a" through "b", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit.

(F) The Permittee shall retain the records identified in Paragraphs "b.v.(1)(F)(i)" through "b.v.(1)(F)(iv)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit [40 CFR §63.506(h)(1)(vi)].

(i) Identification of each parameter, for each item of equipment, for which the Permittee has elected to comply with the requirements of Paragraph "b.v", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit.

(ii) A description of the applicable monitoring system(s), and how compliance will be achieved with each requirement of Paragraphs "b.v.(1)(A)" through "b.v.(1)(E)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit. The description shall identify the location and format (*e.g.*, on-line storage, log entries) for each required record. If the description changes, the Permittee shall retain both the current and the most recent superseded description. The description, and the most recent superseded description, shall be retained as provided in Paragraph "b.i", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, except as provided in Paragraph "b.v.(1)(F)(iv)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit.

H. GEU-016 - Latex Production:

- **EU-016A - EU-016AA - Reactors, Supporting Equipment, and Scrubber; EU-016BB - Butadiene Storage Sphere**
- **EU-016CC - Acrylic Acid Tank; EU-016DD - Tertiary-Dodecyl-Mercaptan Tank**
- **EU-016EE - Ammonium Hydroxide Storage Tank; EU-016FF - Hydroxyl-Ethyl-Acrylate Tank**

- **Compliance Demonstration**

H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15). 40 CFR Part 63, Subpart U

b. General Record Keeping and Reporting Requirements, Continued

(iii) A description, and the date, of any change to the monitoring system that would reasonably be expected to impair its ability to comply with the requirements of Paragraph "b.v.(1)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit.

(iv) The Permittee subject to Paragraph "b.v.(1)(F)(ii)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit shall retain the current description of the monitoring system as long as the description is current. The current description shall, at all times, be retained on-site or be accessible from a central location by computer or other means that provides access within 2 hours after a request. The Permittee shall retain all superseded descriptions for at least 5 years after the date of their creation. Superseded descriptions shall be retained on-site (or accessible from a central location by computer or other means that provides access within 2 hours after a request) for at least 6 months after their creation. Thereafter, superseded descriptions may be stored off-site.

(2) If an Permittee has elected to implement the requirements of Paragraph "b.v.(1)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration for a monitored parameter with respect to an item of equipment and a period of 6 consecutive months has passed without an excursion as defined in Paragraph "b.v.(2)(D)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit, the Permittee is no longer required to record the daily average value, for any operating day when the daily average value is less than the maximum, or greater than the minimum established limit. With approval by the Administrator, monitoring data generated prior to the compliance date of this subpart shall be credited toward the period of 6 consecutive months, if the parameter limit and the monitoring accomplished during the period prior to the compliance date was required and/or approved by the Administrator [40 CFR §63.506(h)(2)].

(A) If the Permittee elects not to retain the daily average value, the Permittee shall notify the Administrator in the next Periodic Report as specified in Paragraph "b.iv.(5)(I)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit. The notification shall identify the parameter and unit of equipment [40 CFR §63.506(h)(2)(i)].

(B) If, on any operating day after the Permittee has ceased recording daily average value as provided in Paragraph "b.v.(2)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, there is an excursion as defined in Paragraph "b.v.(2)(D)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) -

H. GEU-016 - LATEX PRODUCTION:

- **EU-016A - EU-016AA - REACTORS, SUPPORTING EQUIPMENT, AND SCRUBBER; EU-016BB - BUTADIENE STORAGE SPHERE**
- **EU-016CC - ACRYLIC ACID TANK; EU-016DD - TERTIARY-DODECYL-MERCAPTAN TANK**
- **EU-016EE - AMMONIUM HYDROXIDE STORAGE TANK; EU-016FF - HYDROXYL-ETHYL-ACRYLATE TANK**

- **COMPLIANCE DEMONSTRATION**

H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15). 40 CFR Part 63, Subpart U

b. General Record Keeping and Reporting Requirements, Continued

H.3.4(15), Compliance Demonstration, Section III.H of this Title V operating permit, the Permittee shall immediately resume retaining the daily average value for each operating day and shall notify the Administrator in the next Periodic Report. The Permittee shall continue to retain each daily average value until another period of 6 consecutive months has passed without an excursion as defined in Paragraph "b.v.(2)(D)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit [40 CFR §63.506(h)(2)(ii)].

(C) The Permittee shall retain the records specified in Paragraphs "b.v.(1)(A)" through "b.v.(1)(C)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, for the duration specified in Paragraph "b.v", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit. For any calendar week, if compliance with Paragraphs "b.v.(1)(A)" through "b.v.(1)(C)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit does not result in retention of a record of at least one occurrence or measured parameter value, the Permittee shall record and retain at least one parameter value during a period of operation other than a start-up, shutdown, or malfunction [40 CFR §63.506(h)(2)(iii)].

(D) For the purposes of Paragraph "b.v", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, an excursion means that the daily average value of monitoring data for a parameter is greater than the maximum, or less than the minimum established value, except as provided in Paragraphs "b.v.(2)(D)(i)" and "b.v.(2)(D)(ii)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit [40 CFR §63.506(h)(2)(iv)].

(i) The daily average value during any start-up, shutdown, or malfunction shall not be considered an excursion for purposes of Paragraph "b.v.(2)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit, if the Permittee follows the applicable provisions of the start-up, shutdown, and malfunction plan required by 40 CFR §63.6(e)(3).

(ii) An excused excursion, as described in Paragraph "a.v", Condition H.3.3, Compliance Demonstration (40 CFR §63.505(i)), shall not be considered an excursion for the purposes of Paragraph "b.v.(2)", Conditions H.3.1, H.3.2(1) - H.3.2(3), H.3.3, H.3.4(1) - H.3.4.(15), Compliance Demonstration, Section III.H of this Title V operating permit.

Section III: Applicable Requirements and Compliance Demonstration

I. GEU-022 - STYROFOAM® PRODUCTION:

- **EU-022A - EU-022E - STYROFOAM® CUTTING, FEEDSTOCK, RAW MATERIAL STORAGE, FINISHING, & RECYCLE**
- **EU-022F - STYROFOAM® PLASTICS PROCESSING, EXTRUSION DIE & PRINTER**
- **EU-022G - EU-022J - RAW MATERIAL STORAGE TANKS AND BOARD STORAGE AREA**

- **APPLICABLE REQUIREMENTS**

TABLE III.I: APPLICABLE REQUIREMENTS GEU-022

Pollutant or Process Parameter	Emissions Unit No.	Limitation or Restriction	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number	F / S
TSP	EU-022A - EU-022E	The Permittee shall emit no more than 2.68 lb/hour	RCSA §22a-174-18(e) Registration No. 092-0078	I.1	S
Methyl Chloride (*Note: Methyl Chloride has been phased out and is not in use at this time*)	GEU-022	(a) The Permittee shall implement a program of reduction and/or replacement of methyl chloride. Should methyl chloride be classified as an exempt solvent or a non-volatile organic compound by the US Environmental Protection Agency and this Department or should the evaluation determine that the reduction and/or replacement of methyl chloride is not technically or economically feasible or represents a compromise to product liability, then implementation of any such programs shall not be required by this order. (b) The investigative program for the reduction and/or replacement of methyl chloride as a blowing agent with the objective to achieve a reduction in volatile organic compound emissions will be continually implemented. A report detailing the progress of these research efforts will be submitted to the Department of Environmental Protection every two years commencing from the date of finalization Order No. 8011.	Order No. 8011 (RCSA §22a-174-20(ee))	I.2	F

Section III: Applicable Requirements and Compliance Demonstration

I. GEU-022 - STYROFOAM® PRODUCTION:

- **EU-022A - EU-022E - STYROFOAM® CUTTING, FEEDSTOCK, RAW MATERIAL STORAGE, FINISHING, & RECYCLE**
- **EU-022F - STYROFOAM® PLASTICS PROCESSING, EXTRUSION DIE & PRINTER**
- **EU-022G - EU-022J - RAW MATERIAL STORAGE TANKS AND BOARD STORAGE AREA**

- **APPLICABLE REQUIREMENTS**

TABLE III.I: APPLICABLE REQUIREMENTS GEU-022

<table>
<tr><th>Pollutant or Process Parameter</th><th>Emissions Unit No.</th><th>Limitation or Restriction</th><th>Applicable Regulatory References/ Citations</th><th>Compliance Demonstration Condition Number</th><th>F / S</th></tr>
<tr><td rowspan="10">VOC</td><td rowspan="10">EU-022F</td><td colspan="2">Notwithstanding the development of a lesser emissions rate pursuant to the analysis required in Condition I.2 above, Table III.I of this Title V operating permit, the Styrofoam® process is limited to the use-based limitations in pounds of total VOC blowing agent per pound of polymer extruded as follows:
Note: In order to maintain the confidentiality of formulations exclusive to this process, the following codes will identify the complete descriptions located in Appendix A of the RACT Technical Support Document.</td><td rowspan="10">Order No. 8011 (RCSA §22a-174-20(ee))</td><td rowspan="10">I.3</td><td rowspan="10">F</td></tr>
<tr><td>Product Classification</td><td>Post-RACT Allowable Number of Total Pounds of VOC per 100 Pounds of Polymer Extruded</td></tr>
<tr><td>“A”</td><td>4.5</td></tr>
<tr><td>“B”</td><td>4.5</td></tr>
<tr><td>“C”</td><td>4.5</td></tr>
<tr><td>“D”</td><td>5.0</td></tr>
<tr><td>“E”</td><td>11.5</td></tr>
<tr><td>“F”</td><td>6.5</td></tr>
<tr><td>“G”</td><td>8.5</td></tr>
<tr><td>Any new product class formulations developed subsequent to the effective date of Order No. 8011.</td><td>8.5</td></tr>
</table>

Section III: Applicable Requirements and Compliance Demonstration

I. GEU-022 - STYROFOAM® PRODUCTION:

- **EU-022A - EU-022E - STYROFOAM® CUTTING, FEEDSTOCK, RAW MATERIAL STORAGE, FINISHING, & RECYCLE**
- **EU-022F - STYROFOAM® PLASTICS PROCESSING, EXTRUSION DIE & PRINTER**
- **EU-022G - EU-022J - RAW MATERIAL STORAGE TANKS AND BOARD STORAGE AREA**

- **APPLICABLE REQUIREMENTS**

TABLE III.I: APPLICABLE REQUIREMENTS GEU-022

Pollutant or Process Parameter	Emissions Unit No.	Limitation or Restriction	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F/S
HCFC-142b HCFC-22	GEU-022	The Permittee shall investigate suitable substitutes for the use of HCFC-22 and HCFC-142b.	CAA §610(d) "*Non-Essential Product Ban*" & CAA §612 "*Significant New Alternatives Policy*" (SNAP); 40 CFR Part 82, Subpart G & Appendices	I.4	F
		(a) It is illegal for the Permittee to replace a Class I or Class II substance with any substitute which the Administrator determines may present adverse effects to human health or the environment where other substitutes have been identified that reduce overall risk and are currently or potentially available. (b) It is illegal to replace an ozone depleting substance (ODS) with a substitute listed by SNAP as "unacceptable" as of that day. The Permittee shall obey conditions placed on various substitutes and limits placed on where they can be used. Restrictions relevant to a given substitute are described in the rule listing that substitute. (c) The Permittee shall immediately cease use of HCFC-22 or HCFC-142b once listed under the unacceptable substitute list.			
		(a) Effective January 1, 2020, the Permittee shall discontinue all use (consumption) of HCFC-22 and HCFC-142b. (b) Effective January 1, 2030, the Permittee shall discontinue all use of Class II Substances.	40 CFR §82.40		

- **COMPLIANCE DEMONSTRATION**

I.1. TSP: Emissions of TSP shall not exceed those limits stated in Condition I.1, Table III.I of this Title V operating permit during any one hour. Demonstration of compliance shall be based on, but not limited to, the following requirements:

I.1.a. <u>Monitoring and Testing Requirements</u>

The Permittee shall verify the dust collection system and baghouse are operated correctly by monitoring filter differential pressure. Should the differential pressure increase over desired operating range, the Permittee shall service the baghouse according to manufacturers guidelines [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

Section III: Applicable Requirements and Compliance Demonstration

I. GEU-022 - STYROFOAM® PRODUCTION:

- **EU-022A - EU-022E - STYROFOAM® CUTTING, FEEDSTOCK, RAW MATERIAL STORAGE, FINISHING, & RECYCLE**
- **EU-022F - STYROFOAM® PLASTICS PROCESSING, EXTRUSION DIE & PRINTER**
- **EU-022G - EU-022J - RAW MATERIAL STORAGE TANKS AND BOARD STORAGE AREA**

- **COMPLIANCE DEMONSTRATION**

I.2. **Methyl Chloride:** There are no monitoring, testing, record keeping, or reporting requirements at this time for Condition I.2, Table III.I of this Title V operating permit. The Permittee shall not re-introduce the use of Methyl Chloride as a blowing agent without first consulting with the Commissioner [Order No. 8011].

I.3 **VOC:** VOC content in "lb of total VOC blowing agent/100 lb of polymer extruded" shall not exceed those limits stated in Condition I.3, Table III.I of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

I.3.a. **Monitoring and Testing Requirements**

i. The Permittee shall monitor product formulations and categorize such product formulations according to the classifications (and formulations) set forth in Condition I.3, Table III.I and in the VOC RACT Technical Support Documentation to ensure that the Post-RACT limitations are not exceeded per each product classification [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

ii. The Permittee shall maintain (and not exceed) the operating parameters corresponding to each product formulation whenever that product formulation is utilized [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

iii. Prior to using any new product class formulations, the Permittee shall analyze such new product class formulations to determine the "lb VOC/100 lb polymer extruded" following the procedures set forth in the VOC RACT Technical Support Document.

I.3.b. **Record Keeping Requirements**

The Permittee shall maintain records of the requirements above in Paragraph "a", Condition I.3, Section III.I "Monitoring and Testing Requirements" of this Title V operating permit [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

I.4. **HCFC-142b & HCFC-22:** Demonstration of compliance shall be based on, but not limited to, the following requirements:

I.4.a. **Monitoring and Testing Requirements**

i. To demonstrate compliance, the Permittee shall document, and retain on file, the results of their evaluation of acceptable alternatives, including target specifications for each system, processing information, purchasing orders, sampling receipts, shipping records, phone logs and test results. Documents should contain [CAA §612 & 40 CFR Part 82, Subpart G]:

(1) Descriptions of substitutes examined and rejected;

(2) Application and processes or products in which the substitute is needed;

I. GEU-022 - STYROFOAM® PRODUCTION:

- **EU-022A - EU-022E - STYROFOAM® CUTTING, FEEDSTOCK, RAW MATERIAL STORAGE, FINISHING, & RECYCLE**
- **EU-022F - STYROFOAM® PLASTICS PROCESSING, EXTRUSION DIE & PRINTER**
- **EU-022G - EU-022J - RAW MATERIAL STORAGE TANKS AND BOARD STORAGE AREA**

- **COMPLIANCE DEMONSTRATION**

I.4.a. Monitoring and Testing Requirements, Continued

(3) Reason for rejection of other alternatives, e.g., performance, technical or safety standard;
(4) Anticipated date other substitutes will be available; and
(5) Projected time for switching to other available substitutes.

ii. The Permittee shall monitor handling of acceptable substitutes to ensure that the specified restrictions, if any, are met [CAA §612 & 40 CFR Part 82, Subpart G].

iii. The Permittee shall monitor the SNAP updates posted on the US EPA website (http://www.epa.gov/spdpublc/snap/index.html) or at the Stratospheric Protection Hotline at (800)-296-1996 to ensure that HCFCs are not phased out ahead of schedule from the foam end uses. The Permittee shall begin using non-ozone-depleting alternatives as soon as they are available in anticipation of future action by the Administrator restricting the use of HCFCs [CAA §612 & 40 CFR Part 82, Subpart G].

iv. The Administrator reserves the right to inspect the premises to ensure the use of HCFCs adhere to all relevant codes [CAA §612 & 40 CFR Part 82, Subpart G].

I.4.b. Record Keeping Requirements

The Permittee shall maintain records of the requirements above in Paragraph "a", Condition I.4, "*Monitoring and Testing Requirements,*" Section III.I of this Title V operating permit [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

J. EU-028 & EU-029 - BOILER NOS. E7C4 AND E7D3

- **APPLICABLE REQUIREMENTS PER EACH BOILER**

TABLE III.J: APPLICABLE REQUIREMENTS EU-028 & EU-029

Pollutant or Process Parameter	Emissions Unit	Fuel	Limitation or Restriction	Applicable Regulatory References	Compliance Demonstration Condition Number	F/S
NO_X	EU-028	Natural Gas	Less than or equal to: • 0.06 lb/MMBTU • 3.48 lb/hour	Permit No. 092-0015	J.1	F
		No. 2 Fuel Oil	Less than or equal to: • 0.10 lb/MMBTU • 5.76 lb/hour			
		Combined	Less than or equal to 15.24 TPY Total			
	EU-029	Natural Gas	Less than or equal to: • 0.06 lb/MMBTU • 2.84 lb/hour	Permit No. 092-0020		F
		No. 2 Fuel Oil	Less than or equal to: • 0.10 lb/MMBTU • 4.83 lb/hour			
		Combined	Less than or equal to 12.46 TPY Total			
SO_X	EU-028	Natural Gas	Less than or equal to: • 0.0006 lb/MMBTU • 0.034 lb/hour	Permit No. 092-0015	J.2	F
		No. 2 Fuel Oil	Less than or equal to: • 0.20% sulfur by weight (dry basis) • 0.20 lb/MMBTU • 11.79 lb/hour			
		Combined	Less than or equal to 14 TPY total			
	EU-029	Natural Gas	Less than or equal to: • 0.0006 lb/MMBTU • 0.028lb/hour	Permit No. 092-0020		F
		No. 2 Fuel Oil	Less than or equal to: • 0.20% sulfur by weight (dry basis) • 0.20 lb/MMBTU • 9.88 lb/hour			
		Combined	Less than or equal to 14 TPY total			

J. EU-028 & EU-029 - BOILER NOS. E7C4 AND E7D3

- **APPLICABLE REQUIREMENTS PER EACH BOILER**

TABLE III.J: APPLICABLE REQUIREMENTS EU-028 & EU-029

Pollutant or Process Parameter	Emissions Unit No.	Fuel Type	Limitation or Restriction	Applicable Regulatory References	Compliance Demonstration Condition Number	F/S
CO	EU-028	Natural Gas	Less than or equal to: • 0.12 lb/MMBTU • 7.20 lb/hour	Permit No. 092-0015	J.3	F
		No. 2 Fuel Oil	Less than or equal to: • 0.12 lb/MMBTU • 7.13 lb/hour			
		Combined	Less than or equal to 31.54 TPY Total			
	EU-029	Natural Gas	Less than or equal to: • 0.12 lb/MMBTU • 5.63 lb/hour	Permit No. 092-0020		F
		No. 2 Fuel Oil	Less than or equal to: • 0.12 lb/MMBTU • 5.56 lb/hour			
		Combined	Less than or equal to 24.66 TPY Total			
VOC	EU-028	Natural Gas	Less than or equal to: • 0.003 lb/MMBTU • 0.16 lb/hour	Permit No. 092-0015	J.4	F
		No. 2 Fuel Oil	Less than or equal to: • 0.001 lb/MMBTU • 0.083 lb/hour			
		Combined	Less than or equal to 0.068 TPY Total			
	EU-029	Natural Gas	Less than or equal to: • 0.0028 lb/MMBTU • 0.13 lb/hour	Permit No. 092-0020		F
		No. 2 Fuel Oil	Less than or equal to: • 0.0014 lb/MMBTU • 0.30 lb/hour			
		Combined	Less than or equal to 0.58 TPY Total			

J. EU-028 & EU-029 - BOILER NOS. E7C4 AND E7D3

- **APPLICABLE REQUIREMENTS PER EACH BOILER**

TABLE III.J: APPLICABLE REQUIREMENTS EU-028 & EU-029

Pollutant or Process Parameter	Emissions Unit No.	Fuel Type	Limitation or Restriction	Applicable Regulatory References	Compliance Demonstration Condition Number	F/S
TSP	EU-028	Natural Gas	Less than or equal to: • 0.013 lb/MMBTU • 0.77 lb/hour	Permit No. 092-0015	J.5	F
		No. 2 Fuel Oil	Less than or equal to: • 0.014 lb/MMBTU • 0.83 lb/hour			
		Combined	Less than or equal to 3.36 TPY Total			
	EU-029	Natural Gas	Less than or equal to: • 0.014 lb/MMBTU • 0.65 lb/hour	Permit No. 092-0020		F
		No. 2 Fuel Oil	Less than or equal to: • 0.014 lb/MMBTU • 0.70 lb/hour			
		Combined	Less than or equal to 2.84 TPY Total			
PM_{10}	EU-028	Natural Gas	Less than or equal to: • 0.013 lb/MMBTU • 0.77 lb/hour	Permit No. 092-0015		F
		No. 2 Fuel Oil	Less than or equal to: • 0.007 lb/MMBTU • 0.42 lb/hour			
		Combined	Less than or equal to 3.36 TPY Total			
	EU-029	Natural Gas	Less than or equal to: • 0.014 lb/MMBTU • 0.65 lb/hour	Permit No. 092-0020		F
		No. 2 Fuel Oil	Less than or equal to: • 0.0072 lb/MMBTU • 0.35 lb/hour			
		Combined	Less than or equal to 2.84 TPY Total			

J. EU-028 & EU-029 - BOILER NOS. E7C4 AND E7D3

- **APPLICABLE REQUIREMENTS PER EACH BOILER**

TABLE III.J: APPLICABLE REQUIREMENTS EU-028 & EU-029

Pollutant or Process Parameter	Emissions Unit No.	Fuel Type	Limitation or Restriction	Applicable Regulatory References	Compliance Demonstration Condition Number	F/S
Fuel Firing Rate (Hourly)	EU-028	Natural Gas	Less than or equal to 55,980 ft^3/hour	Permit No. 092-0015	J.6	F
		No. 2 Fuel Oil	Less than or equal to 415 gallon/hour			
	EU-029	Natural Gas	Less than or equal to 47,400 ft^3/hour	Permit No. 092-0020		F
		No. 2 Fuel Oil	Less than or equal to 348 gallon/hour			
Fuel Consumption Rate (Annual)	EU-028	Natural Gas	Less than or equal to 490,384,800 ft^3/year	Permit No. 092-0015		F
		No. 2 Fuel Oil	Less than or equal to 985,915 gallon/year			
	EU-029	Natural Gas	Less than or equal to 415,224,000 ft^3/year	Permit No. 092-0020		F
		No. 2 Fuel Oil	Less than or equal to 985,915 gallon/year			
HAP (State) Formaldehyde	EU-028	Natural Gas	Less than or equal to 77.70 $\mu g/m^3$	Permit No. 092-0015	J.7	F
HAP (State) Sulfuric Acid		No. 2 Fuel Oil	Less than or equal to 3,222.91 $\mu g/m^3$			
HAP (State) Arsenic			Less than or equal to 2.44 $\mu g/m^3$			
HAP (State) Beryllium			Less than or equal to 0.069 $\mu g/m^3$			
HAP (State) Chromium			Less than or equal to 4.61 $\mu g/m^3$			
HAP (State) Nickel			Less than or equal to 84.39 $\mu g/m^3$			
HAP (State) Cadmium			Less than or equal to 9.56 $\mu g/m^3$			
HAP (State) Formaldehyde			Less than or equal to 80.89 $\mu g/m^3$			

J. EU-028 & EU-029 - Boiler Nos. E7C4 and E7D3

- **Applicable Requirements Per Each Boiler**

Table III.J: Applicable Requirements EU-028 & EU-029

Pollutant or Process Parameter		Emissions Unit No.	Fuel Type	Limitation or Restriction	Applicable Regulatory References	Compliance Demonstration Condition Number	F/S
HAP (State)	Copper	EU-028	No. 2 Fuel Oil	Less than or equal to 12.13 µg/m^3	Permit No. 092-0015		F
	Lead			Less than or equal to 1.13 µg/m^3			
	Mercury			Less than or equal to 27.39 µg/m^3			
HAP (State)	Formaldehyde	EU-029	Natural Gas	Less than or equal to 72.90 µg/m^3	Permit No. 092-0020	J.7 Continued	F
	Sulfuric Acid		No. 2 Fuel Oil	Less than or equal to 3,001.98 µg/m^3			
	Arsenic			Less than or equal to 2.25 µg/m^3			
	Beryllium			Less than or equal to 0.064 µg/m^3			
	Chromium			Less than or equal to 4.25 µg/m^3			
	Nickel			Less than or equal to 77.80 µg/m^3			
	Cadmium			Less than or equal to 8.81 µg/m^3			
	Formaldehyde			Less than or equal to 74.58 µg/m^3			
	Copper			Less than or equal to 11.19 µg/m^3			
	Lead			Less than or equal to 1.04 µg/m^3			
	Mercury			Less than or equal to 25.26 µg/m^3			
HAP (Federal)		EU-028 & EU-029	No. 2 Fuel Oil & Natural Gas	The Permittee is subject to 40 CFR Part 63, Subpart DDDDD "*NESHAP for Industrial Boilers, Institutional/Commercial Boilers, and Process Heaters*" as "*large liquid fuel subcategory*" sources that are subject to the requirements to submit an initial notification in accordance with 40 CFR §63.9(b) but exempt from the requirement to meet emissions limitation or work practice standards set forth in 40 CFR Part 63, Subpart DDDDD and 40 CFR Part 63, Subpart A.	40 CFR Part 63, Subpart DDDDD 40 CFR §§63.7575 & 63.7506(b)	J.8	F

Section III: Applicable Requirements and Compliance Demonstration

J. EU-028 & EU-029 - BOILER NO. E7C4 AND E7D3

- **COMPLIANCE DEMONSTRATION**

J.1. **NO_X**: Emissions of NO_X shall not exceed those limits stated in Condition J.1, Table III.J of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

J.1.a. **Monitoring and Testing Requirements**

i. The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from Permit Nos. 092-0015 and 092-0020 and the hourly fuel firing rate and the annual fuel consumption rate [Permit No. 092-0015 & -0020].

ii. The Permittee shall operate the low NO_X burners at all times that the boilers are in operation or emitting air pollutants [Permit No. 092-0015 & -0020].

iii. The Permittee shall not shut down the low NO_X burners while the boilers are in operation except for such necessary maintenance as cannot be accomplished when the boilers are not in operation and are not emitting air pollutants [Permit No. 092-0015 & -0020].

iv. The Permittee shall maintain good operational practices by following the manufacturers instructions for both the boilers and the Todd low NO_X burners which have a guaranteed NO_X emissions rate [RCSA §§22a-174-33(j)(1)(K) & 40 CFR 70.6(a)(3)(i)].

v. If required by the Commissioner, the Permittee shall measure emissions using the average of three one-hour tests, each performed over a consecutive 60-minute period [RCSA §22a-174-5(b)(7)]. The emissions testing method for NO_X shall be performed in accordance with Method 7, 40 CFR Part 60 [RCSA §22a-174-5(b)(7)].

J.1.b. **Record Keeping Requirements**

i. The Permittee shall maintain records of the requirements above in Paragraph "a", Condition J.1, "*Monitoring and Testing Requirements*," Section III.J of this Title V operating permit [Permit Nos. 092-0015 & -0020].

ii. The Permittee shall maintain records of all tune-ups, repairs, replacement of parts and other maintenance performed [RCSA §22a-174-(4)(c)(1)].

iii. The Permittee shall maintain records of the dates, times, and places of all emissions testing, the persons performing the measurements, the test methods used, the operating conditions at time of testing, and the results of such testing [RCSA §22a-174-4(c)(1)].

J.2. **SO_X**: Emissions of SO_X shall not exceed those limits stated in Condition J.2, Table III.J of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

J.2.a. **Monitoring and Testing Requirements**

i. The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from Permit Nos. 092-0015 and 092-0020 and the hourly fuel firing rate and the annual fuel consumption rate [Permit Nos. 092-0015 & -0020].

ii. The Permittee shall verify compliance with the fuel sulfur content limitation by monitoring fuel merchant certifications from the fuel supplier certifying the type of fuel, the weight percent of sulfur (dry basis) in the fuel, name of fuel supplier, and the method used to determine the sulfur content of fuel for each shipment of liquid fuel. The Permittee shall monitor monthly meter readings for natural gas usage [RCSA §§22a-174-4(c)(1) & 22a-174-19(a)(5)].

iii. If required by the Commissioner, emissions shall be measured using the average of three one-hour stack tests using Method 6, 40 CFR Part 60 [RCSA §22a-174-5(b)(3)].

J.2.b. **Record Keeping Requirements**

i. The Permittee shall maintain records of the data monitored above required in Paragraph "a", Condition J.2, "*Monitoring and Testing Requirements*," Section III.J of this Title V operating permit [Permit No. 092-0015 & -0020].

J. EU-028 & EU-029 - BOILER NO. E7C4 AND E7D3

- **COMPLIANCE DEMONSTRATION**

J.2.b. **Record Keeping Requirements, Continued**

ii. The Permittee shall maintain records of fuel merchant certifications from the fuel supplier certifying the type of fuel, the weight percent of sulfur (dry basis) in the fuel, name of fuel supplier, and the method used to determine the sulfur content of fuel for each shipment of liquid fuel. The Permittee shall maintain records of monthly meter readings for natural gas [RCSA §§22a-174-4(c)(1) & 22a-174-19(a)(5)].

J.3. **CO**: Emissions of CO shall not exceed those limits stated in Condition J.3, Table III.J of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

J.3.a. **Monitoring and Testing Requirements**

i. The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from Permit Nos. 092-0015 and 092-0020 and the hourly fuel firing rate and the annual fuel consumption rate [Permit No. 092-0015 & -0020].
ii. The Permittee shall maintain good operational practices by following the manufacturers instructions for both the boilers and the Todd low NO_X burners which have a guaranteed CO emissions rate [RCSA §§22a-174-33(j)(1)(K) & 40 CFR 70.6(a)(3)(i)].
iii. If required by the Commissioner, the Permittee shall measure emissions using the average of three one-hour tests, each performed over a consecutive 60-minute period [RCSA §22a-174-5(d)].

J.3.b. **Record Keeping Requirements**

The Permittee shall maintain records of the requirements above in Paragraph "a", Condition J.3, "*Monitoring and Testing Requirements*," Section III.J of this Title V operating permit [Permit No. 092-0015 & -0020].

J.4. **VOC**: Emissions of VOC shall not exceed those limits stated in Condition J.4, Table III.J of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

J.4.a. **Monitoring and Testing Requirements**

i. The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from Permit Nos. 092-0015 and 092-0020 and the hourly fuel firing rate and the annual fuel consumption rate [Permit No. 092-0015 & -0020].
ii. If required by the Commissioner, the Permittee shall measure emissions using the average of three one-hour tests, each performed over a consecutive 60-minute period [RCSA §22a-174-5(a)(6)].

J.4.b. **Record Keeping Requirements**

The Permittee shall maintain records of the requirements above in Paragraph "a", Condition J.4, "*Monitoring and Testing Requirements*," Section III.J of this Title V operating permit [Permit No. 092-0015 & -0020].

J.5. **TSP/PM_{10}**: Emissions of TSP and PM_{10} shall not exceed those limits stated in Condition J.5, Table III.J of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to the following requirements:

J.5.a. **Monitoring and Testing Requirements**

i. The Permittee shall verify compliance with the emissions limitation by use of emissions factors obtained from Permit Nos. 092-0015 and 092-0020 and the hourly fuel firing rate and the annual fuel consumption rate [Permit No. 092-0015 & -0020].

J. EU-028 & EU-029 - BOILER NO. E7C4 AND E7D3

- **COMPLIANCE DEMONSTRATION**

J.5.a. **Monitoring and Testing Requirements, Continued**

ii. If required by the Commissioner, the Permittee shall measure emissions using the average of three one-hour tests, each performed over a consecutive 60-minute period. The emissions testing method for TSP shall be performed in accordance with Method 5, 40 CFR Part 60 [RCSA §22a-174-5(b)(5)].

J.5.b. **Record Keeping Requirements**

i. The Permittee shall maintain records of the requirements above in Paragraph "a", Condition J.5, "*Monitoring and Testing Requirements*," Section III.J of this Title V operating permit [Permit No. 092-0015 & -0020].

ii. The Permittee shall maintain records of boiler maintenance to verify boilers are being properly maintained [RCSA §§22a-174-33(j)(1)(K) & 22a-174-4(c)(1)].

J.6. **Fuel Firing (Hourly) Rate/Fuel Consumption (Annual) Rate**: The fuel firing rate and fuel consumption rate shall not exceed those limits stated in Condition J.6, Table III.J of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

J.6.a. **Monitoring and Testing Requirements**

i. The Permittee shall monitor or mechanically limit the hourly fuel consumption rate for each boiler [Permit No. 092-0015 & -0020].

ii. The Permittee shall monitor monthly and annual amounts of each fuel consumed. If more than one fuel tank services the boilers, the Permittee shall use a fuel-metering device to continuously monitor fuel consumption for each boiler. The Permittee shall determine annual fuel consumption by adding (for each fuel) the current month's fuel usage to that of the previous eleven (11) months. The Permittee shall make these calculations on a monthly basis [Permit No. 092-0015 & -0020].

J.6.b. **Record Keeping Requirements**

The Permittee shall maintain the records required above in Paragraph "a", Condition J.6, "*Monitoring and Testing Requirements*," Section III.J of this Title V operating permit [Permit No. 092-0015 & -0020].

J.7. **State HAP**: HAP emissions shall not exceed those limits stated in Condition J.7, Table III.J of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

J.7.a. **Monitoring and Testing Requirements**

The Permittee shall ensure that each HAP in Condition J.7, Table III.J of this Title V operating permit shall not exceed its respective allowable stack concentration (ASC). The ASC shall be calculated using the emissions factors obtained from Permit Nos. 092-0015 and 092-0020; the hourly fuel firing rate; and the minimum exhaust gas flow rate at maximum rated capacity of the boilers: EU-028: 17,000 acfm (natural gas) and 16,845 acfm (No. 2 fuel oil); EU-029: 15,343 acfm (natural gas) and 15,165 acfm (No. 2 fuel oil) [Permit No. 092-0015 & -0020].

J.7.b. **Record Keeping Requirements**

The Permittee shall maintain the records required above in Paragraph "a", Condition J.7, "*Monitoring and Testing Requirements*," Section III.J of this Title V operating permit [Permit Nos. 092-0015 & 092-0020].

J.8 Federal HAP: The Permittee shall submit an Initial Notification in accordance with 40 CFR Part 63, Subpart A [40 CFR §§63.9(b) & 40 CFR 63.7506(b)].

K. EU-030 - GASOLINE STORAGE TANK AND DISPENSING STATION

- **APPLICABLE REQUIREMENTS**

TABLE III.K: APPLICABLE REQUIREMENTS EU-030

Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F/S
Gasoline Throughput	The Permittee shall limit gasoline throughput to less than 10,000 gallons/year.	RCSA §22a-174-30(b)	K.1	F
VOC	Submerged fill pipe with a discharge point 18 inches or less from the bottom of the storage vessel	RCSA §22a-174-20(a)(3)	K.2	F

- **COMPLIANCE DEMONSTRATION**

K.1. Gasoline Throughput: Gasoline throughput shall not exceed the limitation stated in Condition K.1, Table III.K of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

K.1.a. Monitoring and Testing Requirements

The Permittee shall monitor daily and monthly amounts of fuel throughput for gasoline [RCSA §22a-174-30(b)(6)]. A non-resettable fuel-metering device shall be used to continuously monitor the fuel throughput [RCSA §22a-174-4(c)].

K.1.b. Record Keeping Requirements

The Permittee shall make and keep records of daily and monthly throughput, which demonstrate dispensing station is not subject to RCSA §§22a-174-30(b)(1), (b)(2), (b)(3), or (b)(4). Such records shall be kept for five years and shall be made available for inspection by a representative of the Department or US EPA upon request [RCSA §22a-174-30(b)(6)].

K.2. VOC: Emissions of VOC shall not exceed the limitation state in Condition K.2, Table III.K of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

K.2.a. Monitoring, Testing, and Record Keeping Requirements

Monitoring and record keeping shall not be required because the Permittee cannot violate the applicable requirement unless the tank is physically altered.

K.2.b. Reporting Requirements

The Permittee shall notify the Commissioner if the discharge point of the fill pipe is altered in any way [RCSA §22a-174-33(j)(1)(K) & 40 CFR 70.6(a)(3)(i)].

L. GEU-031 - NO. 2 FUEL OIL STORAGE TANKS: EU-031A - EU-031M

- **APPLICABLE REQUIREMENTS**

TABLE III.L: APPLICABLE REQUIREMENTS GEU-031

Pollutant or Process Parameter	Limitations or Restrictions	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F/S
No.2 Fuel Oil	Tanks are restricted to storing No. 2 fuel oil	40 CFR Part 60, Subpart Kb	L.1	F

- **COMPLIANCE DEMONSTRATION**

L.1. **No. 2 Fuel Oil:** Demonstration of compliance with Condition L.1, Table III.L of this Title V operating permit shall be based on, but not limited to, the following requirements:

L.1.a. **Record Keeping Requirements**

i. The Permittee shall maintain a record of tank dimensions [40 CFR §60.113(d)].

ii. The Permittee shall maintain records of fuel oil stored [40 CFR §60.116b(c)].

Section III: Applicable Requirements and Compliance Demonstration

M. GEU-032 - SOLVENT CLEANING OPERATIONS:

- **EU-032A - SOLVENT CLEANER USING METHYLENE CHLORIDE**
- **EU-032B - SOLVENT CLEANER USING 1,1,1-TRICHLOROETHANE**

- **APPLICABLE REQUIREMENTS**

TABLE III.M: APPLICABLE REQUIREMENTS GEU-032

Pollutant or Process Parameter	Emissions Unit No.	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number	F/ S
Methylene Chloride 1,1,1-Trichloroethane	EU-032A EU-032B	**The Permittee shall comply with the following requirements when operating each immersion batch cold solvent cleaning machine:** Employ a tightly fitting cover that shall be closed at all times except during parts entry and removal and a freeboard ratio of 0.75 or greater.	40 CFR Part 63, Subpart T: 40 CFR §63.462(a)(2)	M.1	F

- **COMPLIANCE DEMONSTRATION**

M.1 Methylene Chloride & 1,1,1-Trichloroethane: Demonstration of compliance with Condition M.1, Table III.M of this Title V operating permit shall be based on, but not limited to, the following requirements:

M.1.a. <u>Work and Operational Practices</u>

The Permittee shall comply with the following required work and operational practices in Paragraphs "a.i" - "a.viii", specified below, Condition M.1, Compliance Demonstration, Section III.M of this Title V operating permit [40 CFR §63.462(c)]:

i. All waste solvent shall be collected and stored by the Permittee into closed containers. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container.

ii. If a flexible hose or flushing device is used, the Permittee shall perform flushing only within the freeboard area of the solvent cleaning machine.

iii. The Permittee shall drain solvent cleaned parts for 15 seconds or until dripping has stopped, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while draining.

iv. The Permittee shall ensure that the solvent level does not exceed the fill line.

v. The Permittee shall wipe any solvent spills immediately during solvent transfers. The wipe rags shall be stored in covered containers meeting the requirements in Paragraph "a.i" above, Condition M.1, Compliance Demonstration, Section III.M of this Title V operating permit.

vi. When an air or pump-agitated solvent bath is used, the Permittee shall ensure that the agitator is operated to produce a rolling motion of the solvent but not observable splashing against tank walls or parts being cleaned.

vii. The Permittee shall ensure that, when the cover is open, the cold cleaning machine is not exposed to drafts greater than 40 meters per minute (132 feet per minutes), as measured between 1 and 2 meters (3.3 and 6.6 feet) upwind and at the same elevation as the tank lip.

viii. The Permittee shall not use the degreasing machines to clean sponges, fabric, wood, and paper products at any time.

N. GEU-033 - Soil Vapor Extraction (SVE) - Fixed Bed Adsorption System:

- **EU-033A - SVE Adsorber/Desorber**
- **EU-033B - SVE Associated Blowers and Pumps**
- **EU-033C - SVE Contaminate Liquid Storage Tank**
- **EU-033D - SVE Air/Water Separator System**
- **EU-033E - SVE Drum Storage Area**

▪ Applicable Requirements

Table III.N: Applicable Requirements GEU-033

Pollutant or Process Parameter	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number	F/ S
VOC	Less than or equal to 1.54 lb/hour, 6.8 TPY	Permit No. 092-0022	N.1	F
APCE Efficiency	Removal efficiency shall be no less than 90% based on total VOCs.			
Maximum Effluent Flow Rate	Shall not exceed 2,100 acfm while in operation			
Minimum Effluent Flow Rate	Shall be no less than 150 acfm while the SVE is in operation			
HAP (State)	HAP actual stack concentration (ASC) shall not exceed the maximum allowable stack concentration (MASC) using the following equation: MASC = 86,641 x HLV (in $\mu g/m^3$ or ppmv) Where, MASC = Maximum Allowable Stack Concentration HLV = Hazard Limiting Value as listed in RCSA §22a-174-29	Permit No. 092-0022	N.2	F

▪ Compliance Demonstration

N.1 VOC/APCE Efficiency/Maximum and Minimum Effluent Flow Rate: Demonstration of compliance with Condition N.1, Table III.N of this Title V operating permit shall be based on, but not limited to, the following requirements:

N.1.a. <u>Monitoring and Testing Requirements</u>

i. The Permittee shall calculate emissions rates in lb/hour and tons per year using emission factors from the SVE pilot test performed by Radian in August 1997 and/or the results of subsequent samples taken as described in Paragraph "a.ii", Condition N.1, below, Compliance Demonstration, Section III.N of this Title V operating permit [Permit No. 092-0022].

ii. The Permittee shall have VOC concentrations in both the influent and effluent sampled on a monthly basis for the first 12-months of operation and then quarterly thereafter, using US EPA approved sampling and analyzing methods [Permit No. 092-0022].

iii. Monthly total emissions shall be calculated based on 100% capture efficiency, 90% control efficiency, and daily operating hours. Annual emissions shall be based on any consecutive 12-month period and shall be calculated by adding the current month's quantity of material processed to that of the previous eleven months [Permit No. 092-0022].

N. GEU-033 - Soil Vapor Extraction (SVE) - Fixed Bed Adsorption System:

- **EU-033A - SVE Adsorber/Desorber**
- **EU-033B - SVE Associated Blowers and Pumps**
- **EU-033C - SVE Contaminate Liquid Storage Tank**
- **EU-033D - SVE Air/Water Separator System**
- **EU-033E - SVE Drum Storage Area**

- **Compliance Demonstration**

N.1.a. **Monitoring and Testing Requirements, Continued**

iv. The Permittee shall monitor effluent flow in acfm on a daily basis from the vapor extraction wells into the adsorption/desorption system [Permit No. 092-0022].

v. The Permittee shall monitor hours of operation on a daily basis including which adsorption bed is used and for how long (normally 1/2 and 1/2) [Permit No. 092-0022].

vi. The Permittee shall operate SVE system in accordance with the manufacturers specifications [Permit No. 092-0022].

N.1.b. **Record Keeping Requirements**

The Permittee shall maintain records of each monitored parameter (VOC emissions rates, concentrations, effluent flow, hours of operation, etc.) required in Paragraphs "a.i" through "a.vi" above, Condition N.1, Compliance Demonstration, Section III.N of this Title V operating permit [Permit No. 092-0022].

N.2 HAP: Demonstration of compliance with Condition N.2, Table III.N of this Title V operating permit shall be based on, but not limited to, the following requirements:

N.2.a. **Monitoring and Testing Requirements**

i. The Permittee is required to demonstrate that the HAP actual stack concentration (ASC) does not exceed its maximum allowable stack concentration (MASC) using the Equation in Condition N.2, Table III.N, of this Title V operating permit [Permit No. 092-0022].

ii. The Permittee may be required to conduct testing to determine concentration of HAPs should the Commissioner determine that operation of the SVE system might reasonably be expected to cause an exceedance of an applicable Hazard Limiting Value (HLV) or Ambient Air Quality Standard [RCSA §22a-174-29(e)(1)].

N.2.b. **Record Keeping Requirements**

The Permittee shall maintain records of MASC and actual stack concentration calculations for each HAP extracted and vented from the SVE System [Permit No. 092-0022].

O. EU-034 - LATEX COOLING TOWER

- **APPLICABLE REQUIREMENTS**

Table III.O: APPLICABLE REQUIREMENTS EU-034

Pollutant or Process Parameter	Limitations or Restrictions	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F/S
TSP	8.74 lb/hour	RCSA §22a-174-18(e)(1)	O.1	S

- **COMPLIANCE DEMONSTRATION**

O.1. TSP: Emissions of TSP shall not exceed those limits in Condition O.1, Table III.O of this Title V operating permit. Demonstration of compliance shall be based on, but not limited to, the following requirements:

O.1.a. Monitoring and Testing Requirements

The Permittee shall verify compliance with emissions rates by maintaining good operating practices for the cooling tower. The Permittee shall exercise care to minimize the following: excessive water flow, excessive airflow, and water bypassing the tower drift eliminators. The Permittee shall visually inspect the cooling tower particularly the drift eliminators on a monthly basis [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

O.1.b. Record Keeping Requirements

The Permittee shall keep records of cooling tower maintenance whenever maintenance is performed on the cooling tower [RCSA §22a-174-33(o)(1)]. The Permittee shall maintain records of drift eliminator inspections [RCSA §22a-174-33(o)(1)].

P. GEU-036 - Refrigeration Units Using Freon-22:

- **EU-036A - MRU 930**
- **EU-036B - Butadiene Chiller**
- **EU-036C - Latex Chiller**
- **EU-036D - North Chiller**
- **EU-036E - South Chiller**

▪ Applicable Requirements

Table III.P: Applicable Requirements GEU-036

Pollutant or Process Parameter	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number	F/S
Refrigerants Subject to 40 CFR Part 82, Subpart F (Freon-22)	A refrigerant leak rate that exceeds 35% of the total refrigerant charge in a 12-month period is subject to all of the applicable requirements of 40 CFR Part 82, Subpart F and the Permittee is required to conduct mandatory repairs, retrofit the system, or retire the system.	40 CFR Part 82, Subpart F (§82.156(i)) "*Recycling and Emissions Reduction*"	P.1	F

▪ Compliance Demonstration

P.1. Refrigerant: Demonstration of compliance with Condition P.1, Table III.P of this Title V operating permit shall be based on, but not limited to, the following requirements:

P.1.a. <u>Monitoring and Testing Requirements</u>

i. The Permittee shall visually monitor chillers for leaks, particularly in joints, on a monthly basis [40 CFR §§82.156, 70.6(a)(3)(i)(B), and RCSA §22a-174-33(j)(1)(K)].

ii. The Permittee shall measure leaks in accordance with test methods set forth in 40 CFR Part 82, during chiller servicing [40 CFR §§82.156, 70.6(a)(3)(i)(B), and RCSA §22a-174-33(j)(1)(K)].

P.1.b. <u>Record Keeping Requirements</u>

The Permittee shall maintain readily accessible records of [40 CFR §82.166]:

i. Date and type of service conducted on the chillers.

ii. Quantity of refrigerant added.

iii. Date refrigerant was purchased.

iv. Should a leak(s) occur which exceeds 35% of the total refrigerant charge in a 12-month period, then the Permittee shall repair the leaks within 30 days. Records shall be maintained of leak rate; method used to determine the leak rate and full charge; the date of discovery that the leak rate was above the trigger rate; the location of the leak to the extent determined to date; any repair work that has already been completed; and the date when that work was completed; the date, type, and results of the failed follow-up verification test; and repair results, and verification tests results.

P.1.c. <u>Reporting Requirements</u>

Should repairs fail verification testing then the Permittee shall notify the Administrator of the US Environmental Protection Agency Region I within 30 days of failed verification testing [40 CFR §§82.156(i) and 82.166(n)].

Section III: Applicable Requirements and Compliance Demonstration

Q. PREMISES-WIDE GENERAL REQUIREMENTS

Table III.Q: PREMISES-WIDE GENERAL REQUIREMENTS

Pollutant or Process Parameter	Applicable Regulatory References/Citations	Compliance Demonstration Requirements
Opacity	RCSA §22a-174-18(a)	(a) **Shall not exceed 20%** (average of 24 consecutive observations (set) recorded at 15-second intervals - minimum of 3 sets in a 60-minute period [40 CFR Part 60, Method 9, Appendix A]; and **shall not exceed 40%** (no longer than 5 minutes (aggregated) in any 60-minute period). (1) Monitoring and Testing Requirements If required by the Commissioner, the Permittee shall measure opacity using Title 40 CFR Part 60, Method 9 stack test [RCSA §22a-174-5(e)(2), 40 CFR §70.6(a)(3), & RCSA §22a-174-33(j)(1)(K)]. (2) Record Keeping Requirements The Permittee shall maintain records of the dates, times, and places of all visible emission observations, persons performing the observations, test methods used, the operating conditions at the time of observation, and the results of such observation [RCSA §22a-174-4(c)(1)].
Annual Emission Statements	RCSA §22a-174-4 & CT SIP	(b) The Permittee shall record annual emissions and submit annual emissions inventory statements to the Commissioner pursuant to RCSA §22a-174-4(c)(1) and the CT SIP.
Emergency Episode Procedures	RCSA §22a-174-6	(c) The Permittee shall comply with the procedures for emergency episodes as specified in RCSA §22a-174-6.
Public Availability of Information	RCSA §22a-174-10	(d) The public availability of information shall apply to the Permittee, as specified in RCSA §22a-174-10.
Prohibition Against Concealment/ Circumvention	RCSA §22a-174-11	(e) The Permittee shall comply with the prohibition against concealment or circumvention as specified in RCSA §22a-174-11.
Fugitive Dust	RCSA §22a-174-18(b)	(f) The Permittee shall take all reasonable precautions to prevent particulate matter from becoming airborne pursuant to the RCSA §22a-174-18(b).
TSP	RCSA §22a-174-18(d)(1)	(g) **Shall not exceed 0.20 lb/MMBTU in No. 2 fuel oil and distillate.** (1) Monitoring and Testing Requirements The Permittee shall: a. Maintain equipment in accordance to the manufacturers instructions [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)]; b. Calculate the emissions rate in lb/MMBTU using manufacturers data or the most recent US EPA AP-42 emissions factors and the hourly fuel consumption rate [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)]; and c. If required by the Commissioner, the Permittee shall measure emissions using the average of three (3) 1-hour, EPA Method 5 (in 40 CFR Part 60) stack tests [RCSA §22a-174-5(b)(5)]. (2) Record Keeping Requirements The Permittee shall keep records of the data monitored in Paragraph (g)(1), Table III.Q, above, of this Title V operating permit [RCSA §§22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

Q. PREMISES-WIDE GENERAL REQUIREMENTS

Table III.Q: PREMISES-WIDE GENERAL REQUIREMENTS

Pollutant or Process Parameter	Applicable Regulatory References/ Citations	Compliance Demonstration Requirements
Severability	RCSA §22a-174-15	(h) Severability shall be applied as specified in the RCSA §22a-174-15.
Emission Fees	RCSA §22a-174-26	(i) The Permittee shall be subject to payment of emissions fees in accordance with RCSA §22a-174-26.
SO_X	RCSA §22a-174-19(a)(2) CGS §16a-21a	(j) **Not to exceed to 1.0% sulfur by weight (dry basis) in non-distillate fuel and 0.30% sulfur by weight (dry basis) in distillate fuel.** (1) Monitoring and Testing Requirements The Permittee shall verify compliance with the fuel sulfur limitation by monitoring fuel merchant certifications from the fuel supplier certifying the type of fuel, the weight percent of sulfur (dry basis) in the fuel, name of fuel supplier, and the method used to determine the sulfur content of fuel for each shipment of liquid fuel [RCSA §22a-174-4(c)(1)]. (2) Record Keeping Requirements The Permittee shall maintain records of fuel merchant certifications from the fuel supplier certifying the type of fuel, the weight percent of sulfur (dry basis) in the fuel, name of fuel supplier, and the method used to determine the sulfur content of fuel for each shipment of liquid fuel [RCSA §§22a-174-4(c)(1) & 22a-174-19(a)(5)].
Malfunction of Control Equipment; Reporting & Required CEM Equipment for Stationary Sources	RCSA §22a-174-7	(k) Control equipment or methods shall be maintained in operation at all times that the source is in operation or is emitting air pollutants. (l) No person shall deliberately shut down any such control equipment, method or other instrument while the source is in operation except for such necessary maintenance as cannot be accomplished when the stationary source itself is not in operation and is not emitting air pollutants.
Prohibition of Air Pollution	RCSA §22a-174-9	(m) No person shall permit or cause air pollution as defined in RCSA §22a-174-1. This applies to air pollutants not otherwise covered by the RCSA §22a-174-1 through §22a-174-100. (n) The Permittee shall operate the premises in accordance with all applicable emissions standards, standards of performance, and any other applicable requirements under 40 CFR, Part 60, Standards of Performance of New Stationary Sources, or Part 61, National Emission Standards for Hazardous Air Pollutants, as from time to time may be amended, which the Administrator has delegated to the Commissioner and which delegation the Commissioner has accepted.

Section III: Applicable Requirements and Compliance Demonstration

R. 112(r) Accidental Release Requirements

Should the Permittee become subject to the regulations for Accidental Release, as defined in 40 CFR Part §68.3, then the Permittee shall submit a risk management plan (RMP) by the date specified in 40 CFR §68.10 and shall certify compliance with the requirements of 40 CFR Part 68 as part of the annual compliance certification as required by 40 CFR Part §70.6(c).

S. Asbestos Requirements

Should the Permittee become subject to 40 CFR Part 61, Subpart M, National Emission Standards for Asbestos, when conducting any renovation or demolition at this premises, then the Permittee shall submit proper notification as described in 40 CFR §61.145(b) and shall comply with all other applicable requirements of Subpart M.

T. Stratospheric Ozone Depleting Substances (40 CFR Part 82) Requirements

The Permittee shall comply with the standards for recycling and emissions reduction of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart F.

Section IV: Compliance Schedule

Table IV: Compliance Schedule			
Emissions Unit	**Applicable Regulation**	**Steps Required for Achieving Compliance Milestones**	**Date by which Step is to be Completed**
GEU-022 (Styrofoam Plant)	40 CFR Part 82 & SNAP CAA §§612 & 610	The Permittee shall schedule an audit with the US EPA to determine if consumption of HCFC-22 and HCFC-142b meets the requirements of SNAP CAA §116 and is warranted.	Three (3) months from date of issuance of this Title V operating permit

Section V: State Enforceable Terms and Conditions

Only the Commissioner of the Department of Environmental Protection has the authority to enforce the terms, Only the Commissioner of the Department of Environmental Protection has the authority to enforce the terms, conditions and limitations contained in this Section.

A. This Title V operating permit does not relieve the Permittee of the responsibility to conduct, maintain and operate the emissions units in compliance with all applicable requirements of any other Bureau of the Department of Environmental Protection or any federal, local or other state agency. Nothing in this Title V operating permit shall relieve the Permittee of other obligations under applicable federal, state and local law.

B. Nothing in this Title V operating permit shall affect the Commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, investigate air pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the Permittee by the Commissioner.

C. **Odors**: the Permittee shall not cause or permit the emissions of any substance or combination of substances which creates or contributes to an odor beyond the property boundary of the premises in accordance with the provisions of RCSA §22a-174-23. Failure to comply with this requirement may result in the assessment of civil penalties and/or the issuance of a State Order.

D. **Noise**: the Permittee shall operate in compliance with the Regulations of Connecticut State Agencies for the control of noise in accordance with RCSA §22a-69-1 through §22a-69-7.4, inclusive.

E. **Hazardous Air Pollutants (HAPs)**: the Permittee shall operate in compliance with the Regulations of Connecticut State Agencies for the control of HAPs in accordance with RCSA §22a-174-29.

F. **Open Burning**: The Permittee is prohibited from conducting open burning, except as may be allowed by CGS §22a-174(f).

G. **Fuel Sulfur Content**: The Permittee shall not use No. 2 fuel oil that exceeds three-tenths (3/10) of one (1) percent sulfur by weight as set forth in CGS §22a-21a.

Section VI: Permit Shield

NO PERMIT SHIELD GRANTED

Section VII: Title V Requirements

The Administrator of the United States Environmental Protection Agency and the Commissioner of Environmental
The Administrator of the United States Environmental Protection Agency and the Commissioner of Environmental Protection have the authority to enforce the terms and conditions contained in this Section.

A. SUBMITTALS TO THE COMMISSIONER & ADMINISTRATOR
The date of submission to the Commissioner of any document required by this Title V operating permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this Title V operating permit, including, but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is delivered or the date three (3) days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this Title V operating permit, the word "day" means calendar day. Any document or action which is required by this Title V operating permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.

Any document required to be submitted to the Commissioner under this Title V operating permit shall, unless otherwise specified in writing by the Commissioner, be directed to: Office of the Director; Compliance & Field Operations Division; Bureau of Air Management; Department of Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

Any submittal to the Administrator of the U. S. Environmental Protection Agency shall be in a computer-readable format and addressed to: Director, Air Compliance Program; Attn: Air Compliance Clerk; Office of Environmental Stewardship; US EPA, Region 1; One Congress Street; Suite 1100 (SEA); Boston, MA 02114-2023.

B. CERTIFICATIONS [RCSA §22a-174-33(b)]
In accordance with RCSA §22a-174-33(b), any report or other document required by this Title V operating permit and any other information submitted to the Commissioner or Administrator shall be signed by an individual described in RCSA §22a-174-2a(a), or by a duly authorized representative of such individual. Any individual signing any document pursuant to RCSA §22a-174-33(b), shall examine and be familiar with the information submitted in the document and all attachments thereto, and shall make inquiry of those individuals responsible for obtaining the information to determine that the information is true, accurate, and complete, and shall also sign the following certification as provided in RCSA §22a-174-2a(a)(5):

> "I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under Section 22a-175 of the Connecticut General Statutes, under Section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute."

C. SIGNATORY RESPONSIBILITY [RCSA §22a-174-2a(a)]
If an authorization pursuant to Section 22a-174-2a(a) of the RCSA is no longer effective because a different individual or position has assumed the applicable responsibility, a new authorization satisfying the requirements of Section 22a-174-2a(a)(2) of the RCSA shall be submitted to the Commissioner prior to or together with the submission of any applications, reports, forms, compliance certifications, documents or other information which is signed by an individual or a duly authorized representative of such individual pursuant to Section 22a-174-2a(a)(2) of the RCSA.

D. ADDITIONAL INFORMATION [RCSA §22a-174-33(j)(1)(X)]
The Permittee shall submit additional information in writing, at the Commissioner's request, within thirty (30) days of receipt of notice from the Commissioner or by such other date specified by the Commissioner, whichever is earlier, including information to determine whether cause exists for modifying, revoking, reopening, reissuing, or suspending the permit or to determine compliance with the permit.

In addition, within fifteen (15) days of the date the Permittee becomes aware of a change in any information submitted to the Commissioner under this Title V operating permit or of any change in any information contained in the application, or that any such information was inaccurate or misleading or that any relevant information was omitted, the Permittee shall submit the changed, corrected, or omitted information to the Commissioner.

Section VII: Title V Requirements

E. MONITORING REPORTS [RCSA §22a-174-33(o)(1)]
A Permittee, required to perform monitoring pursuant this Title V operating permit, shall submit to the Commissioner, on forms prescribed by the Commissioner, written monitoring reports on January 30 and July 30 of each year or on a more frequent schedule if specified in such permit. Such monitoring reports shall include the date and description of each deviation from a permit requirement including, but not limited to:

1. Each deviation caused by upset or control equipment deficiencies; and

2. Each deviation of a permit requirement that has been monitored by the monitoring systems required under this Title V operating permit, which has occurred since the date of the last monitoring report; and

3. Each deviation caused by a failure of the monitoring system to provide reliable data.

F. PREMISES RECORDS [RCSA §22a-174-33(o)(2)]
Unless otherwise required by this Title V operating permit, the Permittee shall make and keep records of all required monitoring data and supporting information for at least five (5) years from the date such data and information were obtained. The Permittee shall make such records available for inspection at the site of the subject source, and shall submit such records to the Commissioner upon request. The following information, in addition to required monitoring data, shall be recorded for each permitted source:

1. The type of monitoring or records used to obtain such data, including record keeping;

2. The date, place, and time of sampling or measurement;

3. The name of the individual who performed the sampling or the measurement and the name of such individual's employer;

4. The date(s) on which analyses of such samples or measurements were performed;

5. The name and address of the entity that performed the analyses;

6. The analytical techniques or methods used for such analyses;

7. The results of such analyses;

8. The operating conditions at the subject source at the time of such sampling or measurement; and

9. All calibration and maintenance records relating to the instrumentation used in such sampling or measurements, all original strip-chart recordings or computer printouts generated by continuous monitoring instrumentation, and copies of all reports required by the subject permit.

G. PROGRESS REPORTS [RCSA §22a-174-33(q)(1)]
The Permittee shall, on January 30 and July 30 of each year, or on a more frequent schedule if specified in this Title V operating permit, submit to the Commissioner a progress report on forms prescribed by the Commissioner, and certified in accordance with RCSA §22a-174-2a(a)(5). Such report shall describe the Permittee's progress in achieving compliance under the compliance plan schedule contained in this Title V operating permit. Such progress report shall:

1. Identify those obligations under the compliance plan schedule in the permit which the Permittee has met, and the dates on which they were met; and

2. Identify those obligations under the compliance plan schedule in this Title V operating permit which the Permittee has not timely met, explain why they were not timely met, describe all measures taken or to be taken to meet them and identify the date by which the Permittee expects to meet them.

Section VII: Title V Requirements

G. PROGRESS REPORTS [RCSA §22a-174-33(q)(1)], continued
Any progress report prepared and submitted pursuant to RCSA §22a-174-33(q)(1) shall be simultaneously submitted by the Permittee to the Administrator.

H. COMPLIANCE CERTIFICATIONS [RCSA §22a-174-33(q)(2)]
The Permittee shall, on January 30 of each year, or on a more frequent schedule if specified in this Title V operating permit, submit to the Commissioner, a written compliance certification certified in accordance with RCSA §22a-174-2a(a)(5) and which includes the information identified in 40 CFR §§70.6(c)(5)(iii)(A) to (C), inclusive.

Any compliance certification prepared and submitted pursuant to RCSA §22a-174-33(q)(2) shall be simultaneously submitted by the Permittee to the Administrator.

I. PERMIT DEVIATION NOTIFICATIONS [RCSA §22a-174-33(p)]
Notwithstanding Subsection D of Section VII of this Title V operating permit, the Permittee shall notify the Commissioner in writing, on forms prescribed by the Commissioner, of any deviation from an emissions limitation, and shall identify the cause or likely cause of such deviation, all corrective actions and preventive measures taken with respect thereto, and the dates of such actions and measures as follows:

1. For any hazardous air pollutant, no later than twenty-four (24) hours after such deviation commenced; and

2. For any other regulated air pollutant, no later than ten (10) days after such deviation commenced.

J. PERMIT RENEWAL [RCSA §22a-174-33(j)(1)(B)]
All of the terms and conditions of this permit shall remain in effect until the renewal permit is issued or denied provided that a timely renewal application is filed in accordance with Sections 22a –174-33(g), -33(h), and –33(i) of the RCSA.

K. OPERATE IN COMPLIANCE [RCSA §22a-174-33(j)(1)(C)]
The Permittee shall operate the source in compliance with the terms of all applicable regulations, the terms of this Title V operating permit, and any other applicable provisions of law. In addition, any noncompliance constitutes a violation of the Clean Air Act and Chapter 446c of the Connecticut General Statutes and is grounds for federal and/or state enforcement action, permit termination, revocation and re-issuance, or modification, and denial of a permit renewal application.

L. COMPLIANCE WITH PERMIT [RCSA §22a-174-33(j)(1)(G)]
This Title V operating permit shall not be deemed to:
1. Preclude the creation or use of emission reduction credits or the trading of such credits in accordance with RCSA §§22a-174-33(j)(1)(I) and 22a-174-33(j)(1)(P), provided that the Commissioner's prior written approval of the creation, use, or trading is obtained;

2. Authorize emissions of an air pollutant so as to exceed levels prohibited under 40 CFR Part 72;

3. Authorize the use of allowances pursuant to 40 CFR Parts 72 through 78, inclusive, as a defense to noncompliance with any other applicable requirement; or

4. Impose limits on emissions from items or activities specified in RCSA §§22a-174-33(g)(3)(A) and -(33)(g)(3)(B) unless imposition of such limits is required by an applicable requirement.

M. INSPECTION TO DETERMINE COMPLIANCE [RCSA §22a-174-33(j)(1)(M)]
The Commissioner may, for the purpose of determining compliance with this Title V operating permit and other applicable requirements, enter the premises at reasonable times to inspect any facilities, equipment, practices, or operations regulated or required under this Title V operating permit; to sample or otherwise monitor substances or parameters; and to review and copy relevant records lawfully required to be maintained at such premises in accordance with this Title V operating permit. It shall be grounds for permit revocation should entry, inspection, sampling, or monitoring be denied or effectively denied, or if access to and the copying of relevant records is denied or effectively denied.

N. PERMIT AVAILABILITY
The Permittee shall have available at the facility at all times a copy of this Title V operating permit.

Section VII: Title V Requirements

O. SEVERABILITY CLAUSE [RCSA §22a-174-33(j)(1)(R)]
The provisions of this Title V operating permit are severable. If any provision of this Title V operating permit or the application of any provision of this Title V operating permit to any circumstance is held invalid, the remainder of this Title V operating permit and the application of such provision to other circumstances shall not be affected.

P. NEED TO HALT OR REDUCE ACTIVITY [RCSA §22a-174-33(j)(1)(T)]
It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Title V operating permit.

Q. PERMIT REQUIREMENTS [RCSA §22a-174-33(j)(1)(V)]
The filing of an application or of a notification of planned changes or anticipated noncompliance does not stay the Permittee's obligation to comply with this Title V operating permit.

R. PROPERTY RIGHTS [RCSA §22a-174-33(j)(1)(W)]
This Title V operating permit does not convey any property rights or any exclusive privileges. This Title V operating permit is subject to, and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby, including CGS §4-181a(b) and RCSA §22a-3a-5(b). This Title V operating permit shall neither create nor affect any rights of persons who are not parties to this Title V operating permit.

S. ALTERNATIVE OPERATING SCENARIO RECORDS [RCSA §22a-174-33(o)(3)]
The Permittee shall, contemporaneously with making a change authorized by this Title V operating permit from one (1) alternative operating scenario to another, maintain a record at the premises indicating when changes are made from one (1) operating scenario to another and shall maintain a record of the current alternative operating scenario.

T. OPERATIONAL FLEXIBILITY AND OFF-PERMIT CHANGES [RCSA §22a-174-33(r)(2)]
The Permittee may engage in any action allowed by the Administrator in accordance with 40 CFR §§70.4(b)(12)(i) to (iii)(B) inclusive, and 40 CFR §§70.4(b)(14)(i) to (iv), inclusive without a Title V non-minor permit modification, minor permit modification or revision and without requesting a Title V non-minor permit modification, minor permit modification or revision provided such action does not:

1. Constitute a modification under 40 CFR Parts 60, 61 or 63,

2. Exceed emissions allowable under this subject Title V operating permit,

3. Constitute an action which would subject the Permittee to any standard or other requirement pursuant to 40 CFR Parts 72 to 78, inclusive, or

4. Constitute a non-minor permit modification pursuant to RCSA §22a-174-2a(d)(4).

At least seven (7) days before initiating an action specified in RCSA §22a-174-33(r)(2)(A), the Permittee shall notify the Administrator and the Commissioner in writing of such intended action.

U. WRITTEN NOTIFICATION [RCSA §22a-174-33(r)(2)(A)]
Written notification required under RCSA §22a-174-33(r)(2), shall include a description of each change to be made, the date on which such change will occur, any change in emissions that may occur as a result of such change, any Title V operating permit terms and conditions that may be affected by such change, and any applicable requirement that would apply as a result of such change. The Permittee shall thereafter maintain a copy of such notice with the Title V operating permit. The Commissioner and the Permittee shall each attach a copy of such notice to their copy of the permit.

V. TRANSFERS [RCSA §§22a-174-2a(g)]
No person other than the Permittee shall act or refrain from acting under the authority of this Title V operating permit unless this Title V operating permit has been transferred to another person in accordance with Connecticut General Statute §22a-6o.

The proposed transferor and transferee of a permit shall submit to the Commissioner a request for a permit transfer on a form provided by the Commissioner. A request for a permit transfer shall be accompanied by any fees required by any applicable provision of the general statutes or regulations adopted thereunder. The Commissioner may also require the proposed transferee to submit with any such request, the information identified in CGS §22a-6m.

Section VII: Title V Requirements

W. REVOCATION [RCSA §22a-174-2a(h)]
The Commissioner may revoke this Title V operating permit on his or her own initiative or on the request of the Permittee or any other person, in accordance with CGS §4-182c, RCSA §22a-3a-5(d), and any other applicable law. Any such request shall be in writing and contain facts and reasons supporting the request. The Permittee requesting revocation of this Title V operating permit shall state the requested date of revocation and provide the Commissioner with satisfactory evidence that the emissions authorized by this Title V operating permit have been permanently eliminated.

Pursuant to the Clean Air Act, the Administrator has the power to revoke this Title V operating permit. Pursuant to the Clean Air Act, the Administrator also has the power to reissue this Title V operating permit if the Administrator has determined that the Commissioner failed to act in a timely manner on a permit renewal application.

This Title V operating permit may be modified, revoked, reopened, reissued, or suspended by the Commissioner, or the Administrator in accordance with RCSA §22a-174-33(r), CGS §22a-174c or §22a-3a-5(d).

X. REOPENING FOR CAUSE [RCSA §22a-174-33(s)]
This Title V operating permit may be reopened by the Commissioner or the Administrator in accordance with RCSA §22a-174-33(s).

Y. CREDIBLE EVIDENCE
Notwithstanding any other provision of this Title V operating permit, for the purpose of determining compliance or establishing whether a Permittee has violated or is in violation of any permit condition, nothing in this Title V operating permit shall preclude the use, including the exclusive use, of any credible evidence or information.